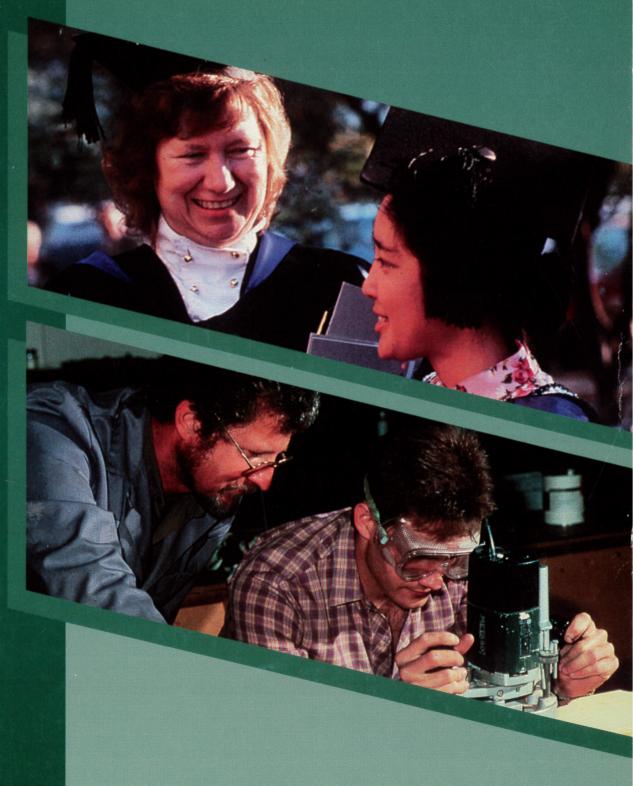


# ABSCLASSIFICATION of QUALIFICATIONS



ABS Catalogue No. 1262.0

# **ABS CLASSIFICATION OF QUALIFICATIONS**

IAN CASTLES

**Australian Statistician** 

**Australian Bureau of Statistics** 

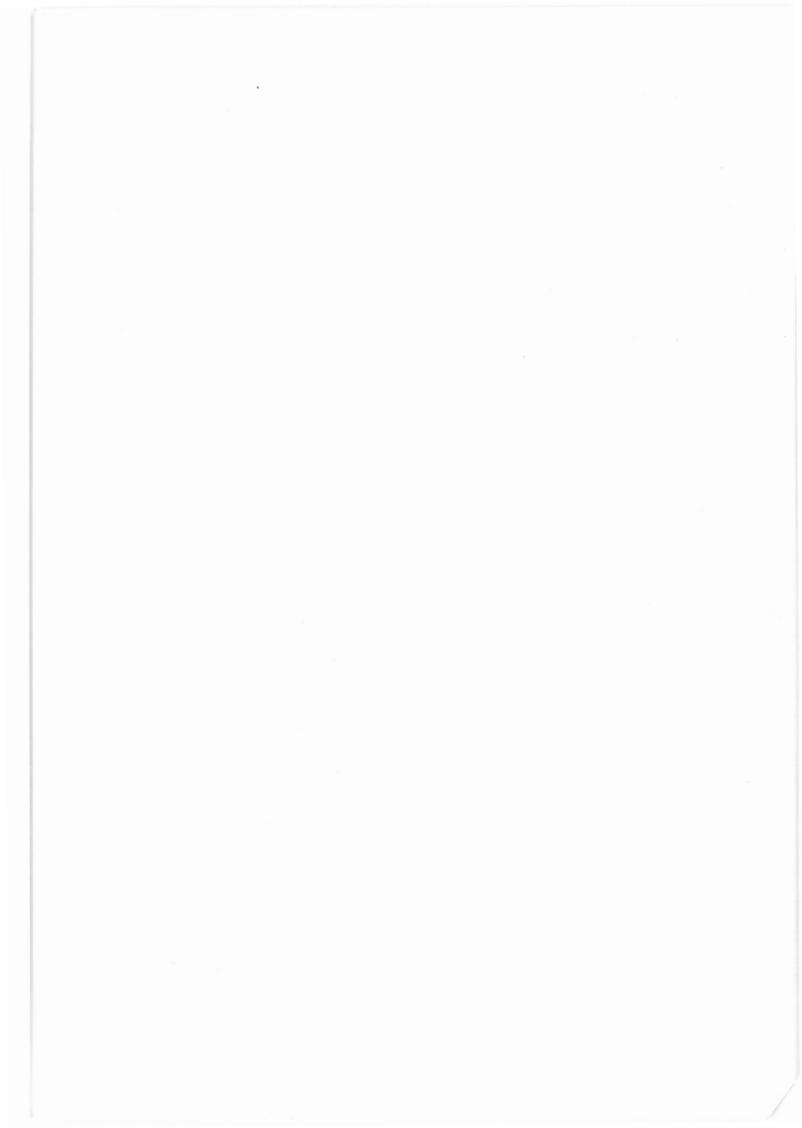
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## **INQUIRIES**

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- other inquires including copies of publications, contact Information Services on Canberra (06) 252 6627 or any ABS State office.
- for information about other ABS statistics and services please refer to the back page of this publication.



#### **PREFACE**

This publication is one of two which present the Australian Bureau of Statistics Classification of Qualifications (ABSCQ). The classification is intended for use with information on post-secondary educational qualifications.

Users of education and labour market statistics in both the private and public sectors have long indicated the need for reliable, accurate and comparable information on the 'stock' of qualifications held by the population to assist in research and policy formation. These users have also identified two main elements, level of attainment and field of study, as being of primary interest. Existing classifications are either limited to one or other of these attributes, and/or do not provide full coverage of the entire range of higher education qualifications.

In light of this clear need, the ABS has developed a classification (ABSCQ) which can be used to present statistics by level of attainment alone, field of study alone, or by level and field together. In keeping with the aims of the 1988 White Paper on Higher Education, the ABSCQ was developed to provide users with information not only on qualifications held by the population, but also on the transferable skills which are inherent in those qualifications. To assist in labour market analysis, the ABSCQ has been developed so that, where appropriate, data coded to the classification can be related broadly to data on occupations coded to the Australian Standard Classification of Occupation (ASCO).

The ABSCQ was first used in the 1991 Census of Population and Housing, and is being introduced into other ABS collections. To enhance comparability of education statistics from different sources, use of the classification by other agencies involved in the production of statistics on post-school qualifications and courses is encouraged.

This classification will be revised periodically to reflect changes in post-school educational qualifications in Australia. Comments and suggestions from users are welcome.

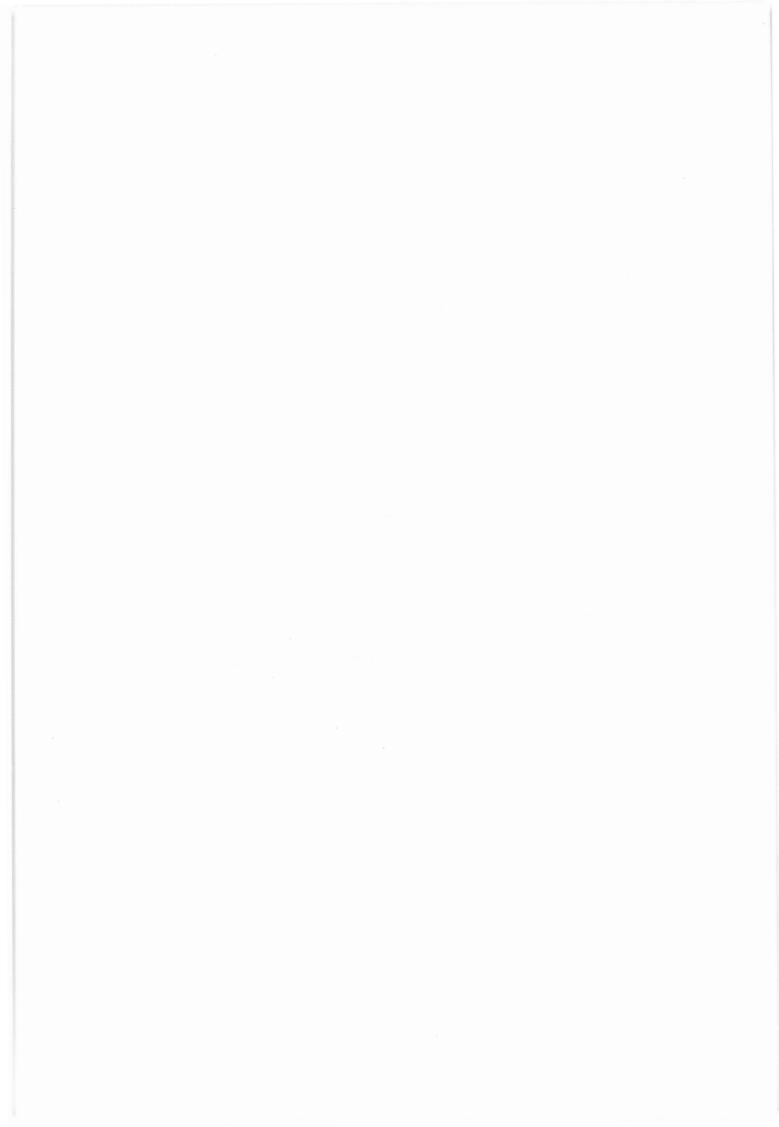
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August 1993

# **ABSCQ**

# PART 1

THE CONCEPTUAL BASIS OF ABSCQ



#### INTRODUCTION

The ABS Classification of Qualifications (ABSCQ) is a statistical classification developed for use in the production and analysis of data on recognised formal post-school educational qualifications. The classification provides for the production of data on educational qualifications held by the population of Australia at the present time. It was initially developed for use in the 1991 Census of Population and Housing and has now been adopted as an ABS standard for use in other ABS surveys.

The classification has been designed for use in the collection and presentation of data on qualifications currently awarded in Australia. Qualifications no longer awarded in Australia and qualifications awarded overseas can also be classified using this system. In such cases, the qualifications are classified to the nearest equivalent contemporary Australian qualification.

The major objective in developing the classification was to foster the production of useful statistics on qualifications. One aim was to provide policy makers with data that would assist in planning for a better educated and more highly skilled population. Thus the classification has been designed:

- (a) to provide a framework for the coding of qualifications data from the 1991 Census,
- (b) to provide quality data on qualifications for analysis by users; and
- (c) to provide a framework to standardise the collection and production of statistics on qualifications.

Although designed primarily as a classification of qualifications already obtained, the ABS Classification of Qualifications may also be used in the production of statistics on educational courses which lead to these qualifications. The ABSCQ is suitable for use in other non-ABS collections, and use of the classification by other agencies is encouraged.

#### SCOPE OF THE CLASSIFICATION

In a general sense, the term 'qualification' may indicate that an individual has certain qualities such as knowledge and skills, or is 'qualified', in a particular field. This knowledge and these skills may be the result of experience, formal learning or informal learning. For the purpose of this classification, a 'qualification' is defined as an award for attainment as a result of formal learning from an accredited post-school institution.

Accreditation is a guarantee that the standards of a course, and the method of delivering that course, are appropriate to the level of the course. Accreditation powers are granted by Federal, State and Territory governments to two types of authorities:

- (a) higher education institutions which, by various acts of their establishment, are empowered to accredit their own courses; and
- (b) the various governmental statutory bodies which accredit tertiary award courses offered through:
  - institutes of TAFE;
  - those higher education institutions that are not self-accrediting; and
  - · private education and training providers.

All State and Territory accreditation authorities currently observe the Register of Australian Tertiary Education (RATE) guidelines on course classification and nomenclature. In the ABSCQ, accredited post-school institutions include the above educational institutions and governmental statutory bodies. In addition, professional bodies which license people to work in particular occupations are included; for example, the various medical colleges which provide accreditation in post-basic medical specialisations.

All awards offered by the educational institutions and bodies outlined above are within the scope of the classification.

The following qualifications are not within the scope of the classification:

- (a) all education up to and including completion of secondary schooling, including Year 12 or equivalent;
- (b) awards for hobby or personal enrichment courses;
- (c) solely employer-based training or on-the-job training (this form of training is usually job/task specific);
- (d) awards from tertiary institutions which are not accredited by the government, and awards from accredited colleges which are not at an accredited tertiary standard; and
- (e) honorary degrees, as these may not be the result of formal learning, but rather an honour for distinguished service to the public.

## **OVERSEAS QUALIFICATIONS**

It was decided for the purpose of this classification, that the most common qualifications from other countries, such as Bachelor of Science etc, can be classified to the Australian equivalent. Other less common overseas qualifications can be classified as far as possible through a query resolution process. The formal recognition of overseas qualifications is not undertaken by the ABS but by the National Office of Overseas Skills Recognition (NOOSR).

#### STRUCTURE OF THE CLASSIFICATION

Users of statistics on qualifications indicated a need for information on the levels of attainment as well as the fields of study of qualifications. The ABSCQ has therefore been designed to classify a qualification according to two elements – Level of Attainment and Field of Study. As a result, statistics on qualifications can be provided by level of attainment alone, field of study alone (in varying degrees of detail), or by level of attainment and field of study together.

If the classification is regarded as a matrix for level of attainment by field of study it is evident that not all fields of study relate to all levels of attainment, nor do all levels of attainment relate to all fields of study.

Level of Attainment is a function of the quality and quantity of learning involved in the course of study leading to the award of a particular qualification. Field of Study is a function of the main subjects studied in the course of study leading to the award of that qualification. Criteria for the disaggregation of each of these variables were developed, enabling the construction of a theoretical framework for the development of the classification.

#### LEVEL OF ATTAINMENT

Level of Attainment is a function of the quality and quantity of learning involved in the course of study leading to the award of a particular qualification. The award of a qualification is therefore an indication that the individual possesses knowledge and practical ability of a certain quality and quantity.

The quality of learning can be considered in terms of three elements – theoretical learning, factual learning and practical learning. Theoretical learning can be described as the understanding of principles, theories, ideas and the relationships between objects. Factual learning can be described as the understanding of sets of facts or information. Practical learning can be described as the ability to perform sets of tasks.

The quantity of learning can be considered in terms of total learning time generally necessary to obtain a particular qualification. This comprises two elements – previous educational attainment required for enrolment in the course of study leading to the qualification; and the amount of learning time necessary to complete the course of study.

#### Criteria for Level of Attainment

It can be seen from the above that the quality and quantity of learning, that is, the level of attainment, can be measured operationally in terms of certain criteria. In the ABSCQ these criteria are:

- (a) the minimum entry requirements for the course (i.e. the minimum amount of prior education needed to undertake the course of study at that level);
- (b) the duration of the course; and
- (c) the theoretical orientation of the course.

The minimum entry requirements refers to the minimum level of knowledge, understanding and skill required to successfully undertake a course of study at that level. However, age and/or experience are sometimes accepted as an indication that an applicant possesses sufficient knowledge to undertake a particular course of study successfully. Courses requiring higher levels of knowledge for entry are considered to be at higher levels of attainment.

The duration of the course is the minimum length of time necessary to successfully acquire the requisite knowledge and skills. Courses requiring greater time for completion are usually considered to be at higher levels of attainment. In the case of part-time courses, the equivalent full-time duration is considered.

The **theoretical orientation** of the course is measured in terms of the balance between theoretical, factual and practical learning. Courses at all levels involve each of these three types of learning and the relative significance of each varies according to the level of attainment. For example, in higher level qualifications theoretical learning is generally of primary significance while practical learning is of primary significance in qualifications at lower levels of attainment.

# Application of the Criteria

The learning associated with a qualification can be analysed in terms of three variables: theoretical learning, factual learning and practical learning. While each of these are present in qualifications at all levels, each level of attainment is characterised by a typical blend of the three variables. That is, higher level qualifications are typically characterised by proportionally larger amounts of theoretical learning, whereas qualifications at the lower levels devote larger proportions of the course to practical learning experiences.

By combining the qualitative and quantitative aspects it is possible to construct criteria which can be applied to all qualifications. In practice the minimum entry requirements and the duration of a course taken together are usually sufficient to distinguish between different levels of attainment. When these two variables are identical, the theoretical orientation of each course is then considered.

#### Structure of the Level of Attainment Classification

The Level of Attainment classification has 7 categories:

- 1 Higher Degree
- 2 Postgraduate Diploma
- 3 Bachelor Degree
- 4 Undergraduate Diploma
- 5 Associate Diploma
- 6 Skilled Vocational Qualifications
- 7 Basic Vocational Qualifications

#### FIELD OF STUDY

Field of Study is defined as the subject matter taught in a course of study leading to the award of a particular qualification. The Field of Study of a qualification then, refers to a set of discrete pieces of factual and practical learning (subject matter). These discrete elements of subject matter are combined and related to each other by a body of theory which enables the subject matter to be applied to a particular type of problem or for a specific purpose. This purpose may be practical (e.g. engineering), abstract (e.g. philosophy) or both (e.g. architecture).

Therefore, field of study, at the broad classification level, is a function of the ways in which subject matter is manipulated or applied through a body of theory for the resolution of problems and the types of problems which are resolved. At finer levels of the classification, field of study is a function of the subject matter content. Therefore, two qualifications have the same field of study if the main subjects studied are the same. In practice, qualifications are classified in the same detailed field of study category if the main subjects studied are sufficiently similar for the purposes of the classification.

Fields of study are related to each other through the number of subjects they have in common, through the broad purposes for which the study is undertaken, and through the theoretical knowledge which underpins the subject matter. For example, biology is related to chemistry and physics because:

- in order to understand biology it is necessary to know some physics and chemistry;
- the study is undertaken for the same broad purpose of understanding natural phenomena; and,
- the same theoretical knowledge is applied, e.g. the scientific method and the nature of the universe.

## Criteria for Field of Study

In the ABSCQ fields of study are classified into groups according to the following criteria:

Theoretical content Purpose of learning Objects of interest Methods and techniques Tools and equipment

**Theoretical content** refers to the ideas and concepts included in a course of study. It can be defined as that part of the subject matter which links facts together to explain other facts and predict outcomes.

Purpose of learning refers to the ultimate aim of the skills and knowledge gained from a course of study. Courses of study generally focus on certain types of problems or sets of tasks. The purpose of studying these courses is, therefore, to learn to deal with those problems or to perform a set of tasks.

Objects of interest are the phenomena, problems or entities studied. They are the 'things' to which the student learns to apply the knowledge and skills of the course. They may, for example, be mathematical problems, vehicles requiring repair, people with a particular illness, or ideas and theories on the nature of truth. This element relates primarily to factual learning.

Methods and techniques are the specific procedures for applying the skills and knowledge gained in a course of study. They may, for example, be steps for solving mathematical problems, techniques for repairing vehicles, or procedures for treating particular ailments.

Tools and equipment are the instruments and implements which an individual learns to use and operate in the course of study. This element relates primarily to practical learning and is the application of the methods and techniques learned.

#### **Application of the Criteria**

At broad levels of aggregation, field of study can be differentiated according to the body of theory defined in terms of the purpose for which it relates and applies the subject matter components. In other words, two qualifications have the same broad field of study if:

- (a) the body of theory manipulates subject matter for the same broad purposes; and
- (b) the subject matter from which the theory is drawn is broadly the same.

All qualifications are associated with a blend of theoretical understanding, factual knowledge and practical skill. In trade qualifications, for example, the emphasis is primarily on practical skill, but a certain amount of theoretical understanding and factual knowledge is also necessary to enable the practical skill to be acquired and applied. If it can be determined that the factual knowledge and the theoretical understanding associated with such a qualification form part of the same body of knowledge as certain higher level qualifications, then it can be asserted that these qualifications have related fields of study.

For example, if a toolmaking qualification considers some of the mathematics, factual knowledge and engineering theory used in mechanical engineering, then it can be said that toolmaking and mechanical engineering are related fields of study at different levels of attainment.

The classification criteria have thus been used to determine the relationship between qualifications. For example, whether or not electrical trades qualifications are related to higher level qualifications in electrical engineering; and whether or not veterinary studies should be associated with medicine or animal husbandry. Any such criteria should be designed to enable the major requirements of users to be met and also to provide a reasonably accurate reflection of reality.

It follows from the above that theoretical understanding and factual knowledge are more important in determining broad field of study than practical skills, and that theoretical understanding is more important than factual knowledge. In order to reflect this, the criteria were applied in the order listed above to construct a three-tiered hierarchical classification.

This means that at the broadest level of the classification, the categories are distinguished from each other primarily on the basis of the theoretical content and purpose of learning. At the intermediate level, the categories are distinguished primarily according to purpose of learning and objects of interest (which refers to factual knowledge). At the most detailed level the categories are distinguished primarily according to methods and techniques, and tools and equipment. Of course in some fields of study theoretical content, purpose of learning and objects of interest are also important in distinguishing between categories at the most detailed level, and have been applied in successively finer degrees of detail when appropriate.

## Structure of the Field of Study Classification

The field of study classification has a three-tiered hierarchical structure. The levels of this hierarchy are termed broad fields, narrow fields and detailed fields.

The **broad fields** of study are the broadest level of the classification and are denoted by 1-digit codes. The **narrow fields** are subdivisions of the broad fields and denoted by 2-digit codes, the first digit representing the relevant broad field and the additional digit representing the narrow field within the broad field. The **detailed fields** of study are the finest level of the classification and are subdivisions of the narrow fields. They are represented by 3-digit codes, the first digit representing the relevant broad field, the first and second digits representing the relevant narrow field and the first, second and third digits representing the detailed field within the narrow field.

The following demonstrates these conventions:

Field of Study	Code	Title
Broad Field Narrow Field	6 67	Engineering Automotive Engineering
Detailed Field	672	Vehicle Mechanics

There are 9 broad fields, 45 narrow fields and 187 detailed fields of study.

#### **CODE CONVENTIONS**

The ABSCQ uses a 4-digit code which is structured so that:

- the first digit indicates the level of attainment;
- the second digit indicates the broad field of study;
- the second and third digits indicate the narrow field of study; and
- the second, third and fourth digits indicate the narrow field of study.

For example, the code for a Certificate in Panelbeating is 7673.

The first digit indicates the level of attainment, i.e. Level 7, Basic Vocational Certificate.

The second digit indicates the broad field of study, i.e. Broad Field 6, Engineering.

The second and third digits indicate the narrow field of study, i.e. Narrow Field 67, Automotive Engineering.

The second, third and fourth digits indicate the detailed field of study, i.e. Detailed Field 673, Panel Beating.

Codes ending in '9' are allocated to known fields of study which may belong to a particular broad or narrow field of study but which are not common enough to form a distinct narrow or detailed field of study. These are the 'other' or 'not elsewhere classified'(nec) categories. These categories should not be used to code responses which are inadequately described or ambiguous.

Codes ending in '0' are assigned to known fields which cannot be coded to the most detailed field of study, but which can be coded to the narrow field of study. Codes ending in '00' are assigned to responses which can only be coded to a broad field of study. Both are described as 'not further defined' (nfd) codes. Codes ending in '000' are assigned to responses which contain only level of attainment information, i.e. there is no information about the field of study of the qualification.

Codes commencing in '0' are assigned to responses which contain no information about the level of attainment of the qualification. Such responses may contain information about the field of study of the qualification.

The codes '8' (for level of attainment) or '888' (for field of study) are assigned to responses which contain information about the level of attainment or field of study but which may be insufficient to code properly. The term used for these types of responses is 'uncodable'.

For the purpose of this classification, a qualification is defined as an award of attainment from an accredited post-school institution as the result of formal learning. If the qualification stated in a response does not meet this requirement then it is 'out of scope' and the code '9989' is assigned to that response. For example, qualifications such as Higher School Certificate, Senior Certificate, hobby and personal enrichment courses are 'out of scope'.

Further details regarding the coding methodology can be found in the publication *ABS Classification of Qualifications – Manual Coding System* (1265.0). This publication is intended primarily to enable users to assign ABSCQ codes to information about qualifications and contains coding indexes and a guide to using these indexes. For further information about this publication and related floppy disc products contact the Classifications, Standards and Dissemination Section of the Australian Bureau of Statistics on (06) 252 5589.

#### **DESIGN CONSTRAINTS**

The theoretical considerations for developing the classification were tempered by other statistical considerations such as the collection of data about qualifications and the statistical balance of the classification.

#### **User Requirements**

The attributes of qualifications which were of primary interest to users of ABS statistics were level of attainment and field of study. Therefore the ABSCQ was designed to classify an educational qualification to those two elements and the classification criteria were selected so as to enable the major requirements of users to be satisfied. However, where there was a known demand for separate information about a specific population, the classification criteria were applied in such a way as to enable this demand to be met. For example, 'Veterinary Science' and 'Veterinary Assisting' are classified together in a separate narrow field, 'Veterinary Studies' rather than classifying 'Veterinary Science' with 'Medicine' and 'Veterinary Assisting' with 'Nursing'.

#### Collectability

The degree of detail possible when using the Classification is dependent on the type of questions asked to collect the information and the type of answers which these questions elicit.

Various question formats and sequences were evaluated in Census tests and the final question wording was tested in the Census Dress Rehearsal conducted in 1990. The questions asked for each respondent's 'highest qualification' and the main 'field of study' for that qualification. A respondent's understanding of what these terms mean affect the type and detail of information provided.

A substantial programme of feasibility testing was undertaken to ensure that the distinctions made in the classification could be made on the basis of data typically provided in response to the Census questions. In a few cases changes were made to the classification structure where distinctions between categories were clearly not viable.

#### **Statistical Balance**

As a general principle a classification should be statistically balanced. Similar numbers of 'real-world' entities should be classified to each category at a particular level, however, categories which have been defined to reflect the real world will not always be statistically balanced. For example, many more people have "certificate" qualifications (including trade certificates), than "diplomas". To force categories to conform to size limitations would mean that the categories would not always be meaningful or useful. On the other hand the number of entities in each category should be sufficiently large to ensure that confidentiality of the data is not breached. The most detailed categories should contain a significant number of qualifications, so that small area data can be reported without identifying individuals. Where fields of study have very small numbers they have generally been assigned to a 'not elsewhere classified' category.

The ABSCQ was designed initially for use in the Census, and it is now being implemented in sample surveys which collect information about post-school qualifications. However, because data from sample surveys at the detailed field of study may be subject to high sampling errors, output data will generally need to be classified to the narrow or broad field of study only. The field of study classification has been designed so that most narrow fields are sufficiently large to allow output at the narrow field level in sample surveys.

## Relatability to the Australian Standard Classification of Occupations (ASCO) - First Edition

Analysis of education in the context of the labour market typically involves the use of statistics on qualifications in conjunction with statistics on occupations. Efforts have been made to ensure that, where appropriate, data coded to the ABSCQ can be related broadly to data on occupations coded to ASCO First Edition.

The classification seeks to reflect an accurate and realistic application of the criteria to qualifications not occupations. To do otherwise would risk introducing a bias into the relationship between data coded to the two classifications, and this could result in a classification of qualifications which is not based on the intrinsic similarities of qualifications. In brief, whereas ASCO is a classification of the skills required to undertake jobs, the ABSCQ is a classification of the skills and knowledge possessed by the population in terms of formal qualifications.

## Compatability with Other Statistical Classifications

In developing the Level of Attainment and the Field of Study variables, a number of other statistical classifications were considered. Wherever practical, an attempt was made to apply the ABSCQ classification criteria in such a way as to facilitate meaningful comparability with data classified to these classifications. However, due to the differing conceptual bases and conflicting design constraints, such compatibility is limited.

These other statistical classifications include the 1986 Census Classification of Qualifications, the International Standard Classification of Education (ISCED) published by the United Nations Educational, Scientific and Cultural Organization (UNESCO) and the Field of Study Classification of Tertiary Education Courses (FOSCTEC) developed by the Department of Employment Education and Training (DEET).

#### 1986 Census Classification of Qualifications

The 1986 Census classification used level of attainment as the basic category in the classification with fields of study allocated to different levels of attainment. That is, the fields of study may be different according to the level at which they were studied. The ABSCQ has maintained some degree of comparability with the 1986 Census classification. However, differences in the classification structure and coding process used in the 1986 Census may pose practical difficulties when attempting detailed comparison. Details of links between levels of attainment and fields of study in the two classifications are contained in Appendix 5.

#### International Standard Classification of Education (ISCED)

The International Standard Classification of Education (ISCED) is a classification of educational programmes rather than qualifications. It classifies courses, programmes and fields in terms of their "educational content" and is used for international comparisons of educational programmes. Conceptually, ISCED and the ABS Classification of Qualifications are similar in approach, although the end products are very different. For example, the approach to level of attainment in the ABSCQ is mirrored in ISCED by the concept of years of schooling, but required further development for use in the Australian context.

The scope of ISCED comprises all regular, formal, school and university education, and adult and special education. On the other hand the scope of the ABSCQ comprises only the formal qualifications from accredited post secondary educational institutions. It is possible to compare ISCED and the ABSCQ, but differences in terminology may cause some difficulties. For example, in ISCED, trade qualifications are referred to as field of 'trade, craft and industrial programmes' and treated as a field of study rather than as a level of attainment. A concordance of the fields of study in the ABSCQ and ISCED can be found in Appendixes 3 and 4.

## Field of Study Classification of Tertiary Education Courses (FOSCTEC)

The Department of Employment Education and Training has developed a Field of Study Classification of Tertiary Education Courses (FOSCTEC). FOSCTEC classifies courses into fields of study on the basis of 'vocational emphasis' which is defined as 'the similarity of potential vocations rather than the similarity of (course) content'. This is different to the ABSCQ which classifies courses with the same subject matter to the same field of study. The level of attainment of a course is not dealt with in FOSCTEC, therefore any comparison between the ABSCQ and FOSCTEC can only be done for field of study. A concordance of the fields of study in the ABSCQ and FOSCTEC can be found in Appendixes 1 and 2.

#### **SUMMARY**

In developing the ABSCQ, a number of broad objectives were identified. These objectives, together with the need to produce a classification which could be used effectively in the Census and a range of other collections, have imposed a number of constraints on the design of the classification.

A number of existing classifications were considered as a starting point for developing the new classification, and a detailed analysis of both FOSCTEC and ISCED was made. Although as much use as possible was made of these classifications, each was rejected as the sole conceptual basis for the ABSCQ.

An alternative approach was taken when developing the ABSCQ. The attributes of an educational qualification which were of primary interest to users, namely the level of attainment and the field of study, were used as the two main elements of the classification.

When developing the Level of Attainment variable, three criteria (minimum entry requirements, duration of course and theoretical orientation) were applied to delineate the categories. The first two criteria are usually sufficient to delineate between courses, however, theoretical orientation is used to distinguish between qualifications which have the same entry requirements and course duration.

In the Field of Study variable of the classification, the classification criteria were given different relative weights in delineating categories at different levels of the hierarchical structure. Broad field of study categories were disaggregated primarily according to theoretical content and purpose of learning. The narrow and detailed fields were disaggregated according to objects of interest, methods and techniques learned and tools and equipment studied.

It is acknowledged that major changes are occurring in the development and recognition of qualifications and credentials in Australia. This classification, however, focuses on qualifications which are formally recognised at the present time.

The ABSCQ has attempted to fulfil the need for improved data on the educational qualifications of the population. The classification has retained comparability with other major educational classifications, where possible, and can be implemented across a range of statistical collections.

# **ABSCQ**

# PART 2

STRUCTURE OF THE CLASSIFICATION

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# **Level of Attainment**

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- 2 Postgraduate Diploma
- 3 Bachelor Degree
- 4 Undergraduate Diploma
- 5 Associate Diploma
- 6 Skilled Vocational Qualifications
- 7 Basic Vocational Qualifications

# **Broad Fields**

- 1 Business and Administration
- 2 Health
- 3 Education
- 4 Society and Culture
- 5 Natural and Physical Sciences
- 6 Engineering
- 7 Architecture and Building
- 8 Agriculture and Related Fields
- 9 Miscellaneous Fields

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	41	Behavioural Studies				
	411	Psychology		51		Life Science
	412	Sociology and Anthropology			511	Biological Science
	413	Politics			512	Environmental Science
	414	History		52		Physical Science
	42	Welfare			521	Physics
	421				522	Chemistry
	422	Child Care			523	Earth Science
		Welfare, nec			529	Physical Science, nec
				53		Mathematics and Statistics
	43	Librarianship			531	Mathematics
	431	Librarianship			532	Statistics
	44	Language and Area Studies		54		Computer Science
	441	Literature		54	541	Computer Science Computer Science
	442	Languages			341	Computer Science
	449	Language and Area Studies, nec		59		Other Natural and Physical Sciences
	45	Religion and Philosophy				Food Science
	451	Religious Studies				Laboratory Technology
	452	Philosophy			599	Other Natural and Physical Sciences, nec
	46	Economics				
	461	Economics	6			ENGINEERING
	47	Law	U			
		Law		61		Surveying and Cartography
					611	
	48	Visual and Performing Arts			612	Cartography
		Music		62		Civil Engineering
		Art and Craft			621	Civil Engineering
	483	Photography		63		Electrical and Electronic Engineering
	484	Graphic Design			631	Electrical and Electronic Engineering
	485	Fashion Design				Science
	486	Drama and Dance			632	Powerline Installation and Maintenance
	489	Visual and Performing Arts, nec			633	Electrical Fitting
	49	Other Society and Culture			634	Automotive Electrics
	491	Geography			635	Refrigeration and Air Conditioning Mechanics
		0 ' '				
	492	Communication			626	Electrical Machanica
	492	Recreation and Leisure			636	Electrical Mechanics  Communications Equipment Installation
					636	
	493	Recreation and Leisure			637	Communications Equipment Installation
	493 494	Recreation and Leisure Policing Studies			637 638	Communications Equipment Installation and Maintenance

64		Mechanical Engineering		6	594	Marine Engineering Science
	641	Mechanical Engineering Science		6	595	Other Engineering Science
	642	Toolmaking		6	596	Marine Construction
	643	Metal Fitting, Turning and Machining		(	597	Wood Machining and Turning
	644	Sheetmetal Working		(	598	Cabinet Making
	645	Boilermaking and Welding		(	599	Other Engineering, nec
	646	Metal Casting and Patternmaking				
	647	Aircraft Maintenance Engineering				
	648	Precision Metal Working	7			ARCHITECTURE AND BUILDING
	649	Mechanical Engineering, nec		71		<b>Building Design</b>
65		Metallurgical and Mining Engineering		,	711	Architecture
	651	Metallurgical Engineering Science		,	712	Interior Design
	652	Mining Engineering Science		,	719	Building Design, nec
	659	Metallurgical and Mining Engineering,				
		nec		72		<b>Building Construction</b>
66		Printing			721	Building Technology
	661	Compositing			722	Carpentry and Joinery
	662	Graphic Reproduction			723	Bricklaying
	663	Printing Machining			724	Painting, Decorating and Signwriting
	664	Binding and Finishing			725	Plastering
	665	Screen Printing			726	Plumbing
	669	Printing, nec			727	Roof Fixing
67	,	Automotive Engineering			728	Floor and Wall Tiling
	671	Automotive Engineering Science			729	Building Construction, nec
	672	Vehicle Mechanics		<b>7</b> 9		Other Architecture and Building
	673	Panel Beating			791	Floor Covering
	674	Vehicle Painting			792	Glass Working
	675	Vehicle Building			793	Quantity Surveying
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	679	Automotive Engineering, nec				
68	3	Textiles, Clothing and Footwear				
	681	Textile Engineering Science	8			AGRICULTURE AND RELATED FIELDS
	682	Garment Making				
	683	Upholstery		81	0.1.1	Agriculture
	684	Footwear			811	Agricultural Science
	689	Textiles, Clothing and Footwear, nec			812	Wool Science
69	)	Other Engineering			813	Animal Husbandry
	691	Chemical Engineering Science			819	Agriculture, nec
	692	• •		82		Horticulture
	693	Industrial Engineering Science			821	Horticulture

89	Other	Agriculture a	and Re	lated Fields	S
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- 891 Fisheries
- 892 Forestry

## 9 MISCELLANEOUS FIELDS

# 91 Hairdressing and Beauty Therapy

- 911 Hairdressing
- 912 Beauty Therapy

# 92 Food and Hospitality Services

- 921 Meat Processing
  - 922 Baking and Pastrycooking
  - 923 Cooking
  - 924 Hospitality Services
  - 925 Waiting and Bar Service
  - 929 Food and Hospitality Services, nec

# 93 Transport

- 931 Ship Operation
- 932 Aircraft Operation
- 933 Air Traffic Control
- 939 Transport, nec

# 99 Other Miscellaneous Fields

- 991 Plant and Machine Operation
- 992 Fire Technology
- 999 Other Miscellaneous Fields, nec

# **ABSCQ**

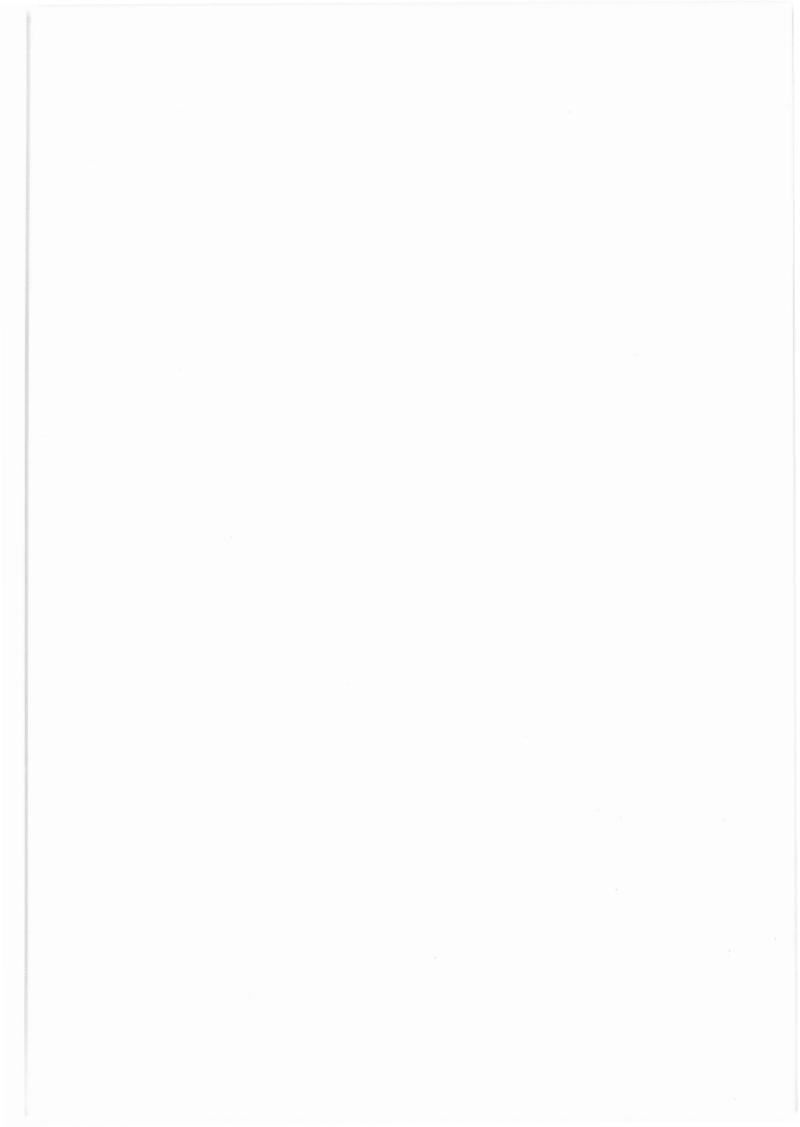
# PART 3

**LEVEL OF ATTAINMENT DEFINITIONS** 



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## Introduction

Level of Attainment is a function of the quality and quantity of learning involved in the course of study leading to the award of a particular qualification. Quality and quantity of learning are measured in terms of three criteria:

- · entry requirements;
- · duration of study; and
- theoretical orientation.

Entry requirements refer to the minimum level of knowledge, understanding and skill required to undertake a course of study at that level of attainment. The minimum level of knowledge and understanding is usually measured by prior level of education obtained. (Age and/or experience may sometimes be accepted as an indication that an individual possesses sufficient knowledge to undertake a particular course of study). As the prerequisite level of knowledge for a course increases, so the level of attainment of the resultant qualification increases.

The duration of study of a course is the usual length of time needed to successfully acquire the requisite skills and knowledge. Courses of a longer duration are generally considered to be at a higher level of attainment. The equivalent full-time duration is considered in the case of part-time courses.

Theoretical orientation refers to the proportion of a course which is theoretical rather than factual or practical. Higher level qualifications are typically characterised by proportionally larger amounts of theoretical learning, whereas qualifications at lower levels of attainment devote larger proportions to practical learning.

The minimum entry requirements and duration of study are usually sufficient to determine the level of a course. When two courses have the same entry requirements and duration of study, the theoretical orientation of each is then considered.

The seven levels of attainment categories are:

- 1 Higher Degree
- 2 Postgraduate Diploma
- 3 Bachelor Degree
- 4 Undergraduate Diploma
- 5 Associate Diploma
- 6 Skilled Vocational Qualifications
- 7 Basic Vocational Qualifications

The classification structure is comparable with that of the Register of Australian Tertiary Education (RATE). RATE includes separate categories for Advanced Certificate and Graduate Certificate, both of which are not large enough to be statistically feasible in the ABSCQ. RATE has a single category for Certificate whereas the ABSCQ has two categories for certificate qualifications – Skilled Vocational Qualifications (includes all trade certificates) and Basic Vocational Qualifications.

## Level 1 Higher Degree

**Higher Degree** courses involve in-depth study in a particular field, and build on the knowledge and skills gained in previous study in the same area. There is usually emphasis on original research. This level includes doctorates and master degrees, either by research or course work.

#### **Entry Requirements**

The entry requirement for a doctorate course is usually the completion of a master degree or a first class honours degree. The minimum entry requirement for a master degree course is usually the completion of an honours degree.

#### **Duration of Study**

The duration of study for a higher degree course is a minimum of two to four years of study for a doctorate, and two years of full-time study or equivalent for a master degree.

#### **Theoretical Orientation**

The focus of a higher degree course is an in-depth theoretical study of the nature and underlying principles of a specific area of interest; that is, they involve a greater proportion of theoretical learning than factual or practical learning. A master degree course usually focuses on researching a topic in the chosen field, whilst a doctorate course involves an original research project resulting in a significant contribution to the knowledge or understanding in the designated field.

## Examples of qualifications include:

Doctor of Philosophy in Astronomy

Doctor of Education in Curriculum (EdD)

Master of Counselling

Master of Applied Science in Environmental Toxicology

Master of Engineering Science in Computer Engineering

Master of Arts in Sociology

Doctor of Veterinary Studies

Master of Social Work

Fellowship of the Royal Australasian College of Physicians (FRACP)

#### Note:

Many of the post-basic medical specialities are included in this level, as the duration of study and the theoretical orientation are commensurate with those required for higher degree qualifications.

## Level 2 Postgraduate Diploma

**Postgraduate Diploma** courses usually build on undergraduate studies, and are designed to broaden or develop professional knowledge and skills in a related or new area of study. This level also includes Graduate Certificates.

## **Entry Requirements**

The entry requirement for a postgraduate diploma course is usually the successful completion of a bachelor degree or an undergraduate diploma.

## **Duration of Study**

The duration of study for a postgraduate diploma course ranges from six months (in the case of Graduate Certificates) to one year full-time study or equivalent.

#### **Theoretical Orientation**

The focus of a postgraduate diploma course is an understanding and critical examination of the principles, theories, models and methods of a specific field of study, and the ability to apply them to particular tasks or problems.

#### Examples of qualifications include:

Graduate Diploma in Migrant Studies
Postgraduate Diploma in Chemistry
Diploma in Clinical Pathology
Graduate Diploma in Forest Science
Graduate Diploma of Arts in Children's Literature
Graduate Diploma of Business in Hospitality
Diploma of Education in Special Education
Graduate Diploma in Teacher Librarianship
Graduate Certificate in Business

#### Inclusions:

Graduate Certificates are included in this level as they have the same entry requirements and broadly the same theoretical orientation as postgraduate diplomas.

#### Level 3 **Bachelor Degree**

Bachelor Degree courses provide individuals with a systematic and coherent introduction to a broad body of knowledge, emphasising the underlying principles and concepts.

#### **Entry Requirements**

The entry requirement for a bachelor degree course is the satisfactory completion of Year 12 or its equivalent.

## **Duration of Study**

The duration of study for a bachelor degree course ranges from three to six years of full-time study or its equivalent.

#### **Theoretical Orientation**

The focus of a bachelor degree course is a broad theoretical understanding of the underlying principles and concepts relating to either a specific, or a general field of knowledge. A greater proportion of the course is concerned with the underlying theories and facts, than with the development of practical skills.

## Examples of qualifications include:

Bachelor of Engineering in Ceramic Engineering

Bachelor of Architecture

Bachelor of Arts in English (Hons)

**Bachelor of Economics** 

Bachelor of Commerce in Accounting

Bachelor of Education in Early Childhood Teaching

Bachelor of Health Science in Nursing

Bachelor of Veterinary Science

Bachelor of Science in Mathematics and Statistics (Hons)

Bachelor of Law

Bachelor of Medicine & Bachelor of Surgery

## Inclusions:

Honours degrees are included in this level.

## Level 4 Undergraduate Diploma

Undergraduate Diploma courses provide individuals with the detailed knowledge and skill base necessary for practice in a professional or para-professional occupation.

## **Entry Requirements**

The entry requirement for an undergraduate diploma course is usually the completion of Year 12 or its equivalent.

## **Duration of Study**

The duration of study for an undergraduate diploma course is three years of full-time study or its equivalent.

#### **Theoretical Orientation**

The focus of undergraduate diploma courses is usually an understanding of specific theories and facts, and the acquisition of related practical skills and techniques.

## Examples of qualifications include:

Certificate in Psychiatric Nursing
Diploma of Applied Science in Air Traffic Service
Diploma of Teaching in Early Childhood Education
Diploma of Applied Science in Prosthetics and Orthotics
Diploma of Applied Science in Nursing
Diploma of Applied Arts in Graphic Design
Diploma of Social Science in Childcare Services
Diploma of Teaching (Primary)

## Note:

Certain other qualifications besides undergraduate diplomas are classified to this level on the basis that their entry requirements, duration of study, and theoretical orientation are regarded as being equivalent to those of undergraduate diplomas (eg. Certificate in Psychiatric Nursing).

## Level 5 Associate Diploma

**Associate Diploma** courses provide individuals with the knowledge and skills necessary to provide support to professionals, and for positions in advanced trade, technical or para-professional occupations.

#### **Entry Requirements**

The entry requirement for an associate diploma course is usually completion of Year 12, or the completion of Year 10 and a pre-requisite certificate course.

#### **Duration of Study**

The duration of study for an associate diploma course ranges from one to two years of full-time study or its equivalent.

#### **Theoretical Orientation**

The focus of an associate diploma course is the development of advanced practical skills in a specific field, with a general understanding of the underlying theories and methods related to that field. These courses may also include the development of supervisory and administrative skills.

#### Examples of qualifications include:

Associate Diploma of Business Administration
Advanced Certificate in Panelbeating
Associate Diploma in Labour Studies
Associate Diploma of Engineering in Civil Engineering
Associate Diploma of Transport Administration
Certificate of Technology in Architectural Drafting
Associate Diploma of Applied Science in Laboratory Science
Advanced Certificate in Law Enforcement Studies
Technician Certificate in Foundry Practice

## Inclusions:

Advanced Certificates, Technician Certificates and Certificates of Technology are included in this level as they have broadly the same theoretical orientation as associate diplomas.

## Level 6 Skilled Vocational Qualifications

**Skilled Vocational Qualifications** courses provide individuals with the knowledge and skills necessary to work in a specific vocation, recognised trade or craft, that requires a high degree of skill, usually in a range of related activities.

## **Entry Requirements**

The entry requirement for a skilled vocational qualification course is usually the completion of Year 10 or its equivalent. In addition, some courses may require the student to be concurrently employed in that specific field.

#### **Duration of Study**

The duration of study for a skilled vocational qualification course is two to four years, and typically incorporates some on-the-job training.

#### **Theoretical Orientation**

The focus of a skilled vocational qualification course is the development of a high degree of practical skill together with the theoretical and factual knowledge required to work in a specific vocation, trade or craft.

## Examples of qualifications include:

Trade Certificate in Vehicle Building Certificate in Landscape Design Trade Certificate in Jewellery Trade Certificate in Carpentry Apprenticeship in Optical Mechanics Trade Certificate in Metal Fabrication Apprenticeship in Electrical Fitting

## Note:

All Trade Certificates are classified to this level. Certain other qualifications besides trade certificates are also classified to this level on the basis that their entry requirements, duration of study, and theoretical orientation are assessed as being equivalent to those of trade certificates.

## Level 7 Basic Vocational Qualifications

Basic Vocational Qualifications courses provide individuals with the practical skills and background knowledge necessary for employment at the operative level in many different fields. They usually emphasise a single activity which can be performed on completion of the course.

## **Entry Requirements**

The entry requirement for a basic vocational qualification course is often Year 10. Many courses, however, have no formal entry requirements.

#### **Duration of Study**

The duration of study of basic vocational qualification course is usually short, typically ranging from about 200 hours to one year of full-time study or equivalent.

#### **Theoretical Orientation**

The focus for a basic vocational qualification course is the development of a limited range of practical skills and the associated knowledge needed to perform a limited range of skilled tasks.

#### Examples of qualifications include:

Pre-apprenticeship in Plumbing
Certificate in Cake Decorating
Certificate in Sculpture
Certificate in Earth Moving Plant Operation
Certificate in Photography
Traineeship Certificate in Advertising
Certificate in Shorthand and Keyboarding
Pre-vocational Certificate in Automotive Mechanics
Certificate of Applied Science in Textile Technology

#### Inclusions:

Pre-apprenticeship Certificates, Pre-vocational Certificates and Certificates of Proficiency (Traineeship Certificates) are included in this level as they have broadly the same entry requirements, duration of study and theoretical orientation.

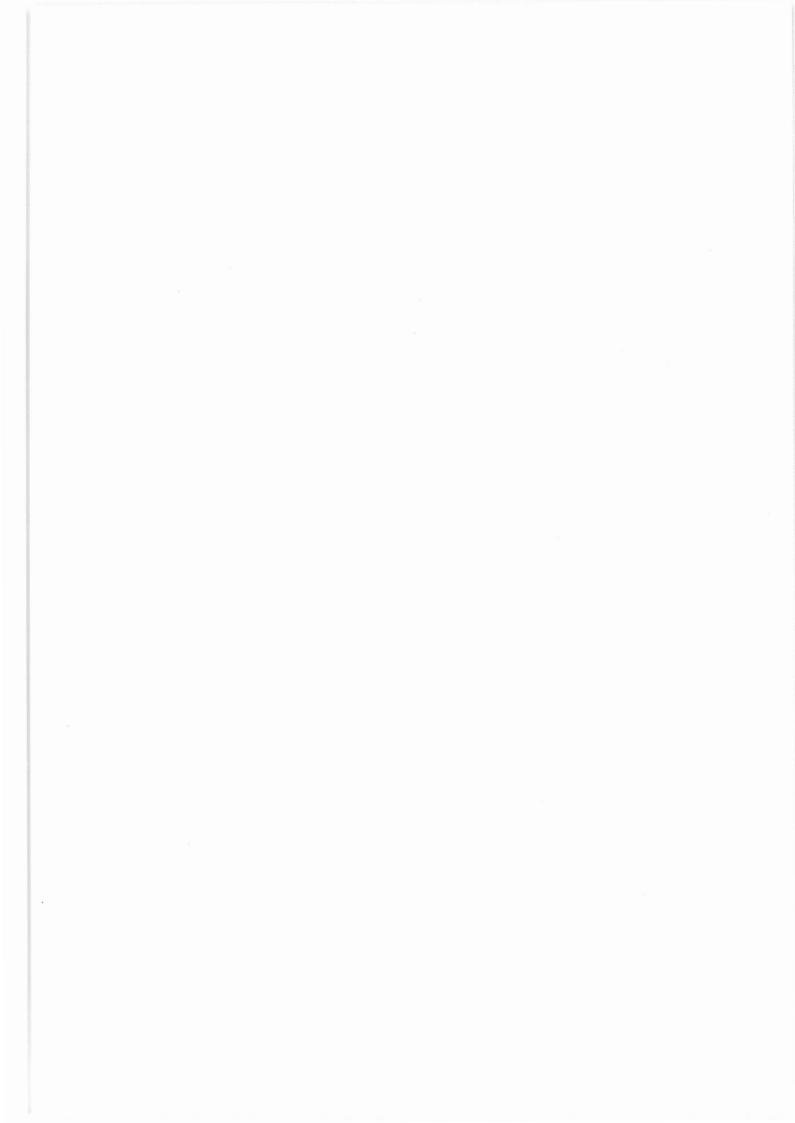
# **ABSCQ**

# PART 4

FIELD OF STUDY DEFINITIONS

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## Introduction

**Field of Study** refers to the subject matter taught in the course of study leading to the award of a particular qualification. In developing the structure of the field of study classification the following criteria were used:

- · theoretical content;
- · purpose of learning;
- objects of interest;
- · methods and techniques; and
- · tools and equipment.

Theoretical content is that part of the subject matter which links facts together to explain other facts and predict outcomes.

The purpose of learning refers to the skills and knowledge gained from a course of study, that is, the application of the body of theory learnt.

The objects of interest are the things or phenomena studied.

The methods and techniques are the specific procedures for applying the knowledge gained in a course of study.

The **tools** and **equipment** are the instruments and implements used to apply the methods and techniques of a course of study.

The Field of Study Classification has a hierarchic structure consisting of the following three levels:

Broad Field Narrow Field Detailed Field

The broad fields are distinguished from each other on the basis of the theoretical content and the purpose of learning. The objects of interest are used to distinguish between the narrow fields in the same broad field. The detailed fields are distinguished from the other detailed fields in the same narrow field on the basis of the methods and techniques, and the tools and equipment.

The Classification consists of 9 broad fields, 46 narrow fields, and 187 detailed fields.

The 9 broad field categories are:

- 1 Business and Administration
- 2 Health
- 3 Education
- 4 Society and Culture
- 5 Natural and Physical Sciences
- 6 Engineering
- 7 Architecture and Building
- 8 Agriculture and Related Fields
- 9 Miscellaneous Fields

# Broad Field 1 Business and Administration

**Business and Administration** is the study of the theory and practice of planning, directing, organising, motivating and co-ordinating the resources of private and public organisations and institutions. It includes the merchandising and provision of goods and services.

The theoretical content of Broad Field 1 Business and Administration includes:

- · management and administration
- human and materials resource management
- sales and marketing
- · finance and financial management
- · human behaviour and communication

The main purpose of this broad field of study is to develop an understanding of the theory and practice of decision making and policy formation, organisational development, planning, financial management and the production, marketing and selling of goods and services.

Fields of study in this broad field are classified into the following narrow fields:

- 11 Management
- 12 Management Support Services
- 13 Sales and Marketing
- 14 Financial Services

#### **Exclusions:**

Politics is excluded from this broad field as it is more concerned with the processes of government than business and administration. It is included in Detailed Field 413 Politics.

## Management

**Management** is the study of planning, directing and operating the functions and activities of organisations and institutions.

The focus of qualifications in management is the goals, policies and design of organisations and institutions. It provides an overall perspective of their operation, resources and organisational structure.

Courses of study in Management aim to develop:

- an understanding of the theory of management and administration and its application in the development, structure and operation of organisations and institutions
- an understanding of the role of staff management and development
- the ability to organise the efficient and effective provision of goods and services
- the ability to plan, co-ordinate and control the activities of an organisation and resolve problems and conflicts associated with the performance of these activities

Fields of study in this narrow field are classified into the following detailed fields:

- 111 Business Management
- 112 Public and Institution Management
- 113 Personnel Management
- 114 Hospitality Management
- 119 Management, nec

## 111 Business Management

**Business Management** is the study of planning and directing the activities of commercial enterprises. It includes the study of the nature, operation and role of business, and the resolution of management and administrative problems.

## Subjects studied include:

Accounting

Administration

**Business Law** 

Communication

Computing

**Economics** 

Organisational Theory

Resource Management

## Skills learnt include:

 identifying and evaluating the economic, legal, social, political and ethical environment in which business operates

- analysing and determining policy issues at a managerial level
- relating organisational and behavioural theory to a business enterprise
- applying the principles of accounting, quantitative methods, personnel development and information systems in a business environment

- 1 111 Master of Business Administration Master of Business Management
- 2 111 Graduate Diploma in Business Administration Graduate Diploma in Shipping
- 3 111 Bachelor of Business in Management
  Bachelor of Arts in Tourism Administration
- 4 111 Diploma in Business Administration Diploma of Business in Management
- 5 111 Associate Diploma of Transport Administration Associate Diploma of Business Administration
- 7 111 Certificate in Transport Administration Certificate in Commercial Shipping Practices

## 112 Public and Institution Management

Public and Institution Management is the study of planning and directing the functions, and the day to day operations of organisations whose primary objective is the provision of services for the public good. It includes the study of governmental procedures, general management and administrative principles, organisational structure and the resolution of management and administrative problems.

## Subjects studied include:

Administration

Organisational Theory

Communication

Accounting

**Public Administration** 

**Public Organisation Management** 

Resource Management

**Public Policy** 

Law

**Economics** 

#### Skills learnt include:

- identifying and evaluating the role of public organisations and public and private institutions in society
- analysing government policy and planning, and developing strategies for its implementation and administration
- relating organisational and behavioural theory to public organisations and public and private institutions
- applying the principles of accounting, quantitative methods, personnel development and information systems in public organisations and public and private institutions

## Examples of qualifications include:

- 1 112 Master of Public Administration Master of Public Policy
- 2 112 Graduate Diploma in Educational Administration

Graduate Diploma in Social Administration

- 3 112 Bachelor of Arts in Public Administration Bachelor of Business in Health Administration
- 4 112 Diploma in Health Administration
  Diploma of Applied Science in Nursing
  Management
- 5 112 Associate Diploma in Local Government Administration

Associate Diploma in Aboriginal Community Administration

- 6 112 Certificate in Public Administration
- 7 112 Certificate in Local Government Certificate in Aboriginal Administration

#### **Exclusions:**

Politics is excluded from this detailed field as it is more concerned with the processes of government than with the management of institutions and public organisations. It is included in Detailed Field 413 Politics.

## 113 Personnel Management

**Personnel Management** is the study of managing human resources within organisations and institutions. It includes the study of recruitment, training, pay scales, employment benefits and personnel development.

## Subjects studied include:

**Behavioural Sciences** 

Communication

Counselling

**Employee Training and Development** 

Organisational Theory and Behaviour

Power and Control in Organisations

Recruitment

#### Skills learnt include:

- analysing the human factors that affect the task of management
- applying various social and behavioural science theories to human resource management
- evaluating the effects on individuals, groups and organisations of various human resource policies, programmes and practices

#### Examples of qualifications include:

1 113 Master of Business in Human Resource Management

Master of Commerce in Organisational Behaviour

2 113 Graduate Diploma in Human Resource
Development

Graduate Diploma in Personnel Management

3 113 Bachelor of Business in Human Resource Management

Bachelor of Business in Personnel

- 4 113 Diploma in Personnel Management
- 5 113 Advanced Certificate in Personnel Management Advanced Certificate in Human Resource Management
- 6 113 Certificate in Personnel Administration
- 7 113 Certificate in Personnel Management Certificate of Business Studies in Personnel

## 114 Hospitality Management

**Hospitality Management** is the study of the operation and function of hospitality organisations such as hotels and motels. It includes the study of the nature and role of hospitality businesses.

## Subjects studied include:

Accounting Principles
Australian Society
Business Law
Hotel and Catering Management
Introduction to Computing
Marketing for Hotels and Restaurants
Premises Planning and Kitchen Design
Sales Promotion for Hotels and Restaurants

#### Skills learnt include:

- identifying and evaluating the environments in which hospitality organisations operate
- relating organisational and behavioural theory to a hospitality organisation
- applying the principles of accounting, quantitative methods, personnel development, information systems and the day to day operations of hospitality organisations

## Examples of qualifications include:

- 2 114 Graduate Diploma of Business in Hospitality
  Graduate Diploma of Hospitality Management
- 3 114 Bachelor of Commerce in Hospitality Bachelor of Hotel Management
- 4 114 Diploma of Business in Hospitality Management
- 5 114 Associate Diploma of Business in Hotel Management
- Advanced Certificate in Hospitality Studies
- 7 114 Certificate in Hotel Operations
  Certificate in Hotel Management

## 119 Management, nec

Management, nec is the study of all Management not elsewhere classified in Narrow Field 11 Management.

- 1 119 Master of Project Management
- 2 119 Graduate Diploma in Logistics Management Graduate Diploma in Agribusiness
- 3 119 Bachelor of International Business
  Bachelor of Arts in Recreation Management
- 4 119 Diploma of Arts in Recreation Management
- 5 119 Advanced Certificate in Materials Management Associate Diploma of Business in Purchasing and Supply
- 7 119 Certificate in Purchasing and Supply Certificate in Supply Management

## **Management Support Services**

**Management Support Services** is the study of planning, organising, managing and operating office systems. It includes the study of office skills.

The focus of qualifications in Management Support Services is administrative and supervisory procedures and practices, information management, office technology, and clerical, shorthand and keyboard skills.

Courses of study in Management Support Services aim to develop:

- · an understanding of the principles of office administration
- an understanding of the exchange and recording of information in an office environment
- an understanding of the training and supervision of staff
- an understanding of the role of office technology and its development and application
- the ability to plan, direct, organise and carry out the day to day operations of an office

Fields of study in this narrow field are classified into the following detailed fields:

- 121 Office Management
- 122 Keyboarding and Shorthand
- 129 Management Support Services, nec

## 121 Office Management

Office Management is the study of co-ordinating office systems. It includes the study of the principles and co-ordination of integrated electronic office systems and office technology, and the techniques of supervising and training staff.

#### Subjects studied include:

Accounting

**Business Computing** 

**Business Law** 

Control of Office Support Systems

Marketing

Office Communication

Planning Conferences and Meetings

Supervision of Office Systems/Personnel

Shorthand/Keyboard

#### Skills learnt include:

- evaluating the functions and objectives of organisations and the tasks undertaken by professional and administrative staff
- undertaking supervision and training of staff
- co-ordinating and supervising the operation of office systems and technology
- applying business concepts to day to day office operations

#### Examples of qualifications include:

- 2 121 Graduate Diploma in Office Management Graduate Diploma in Office Systems
- 3 121 Bachelor of Business in Office Management
  Bachelor of Applied Science in Medical Record
  Administration
- 5 121 Associate Diploma in Agricultural Office
  Administration
- 6 121 Certificate in Records Management
- 7 121 Certificate in Office Systems

## 122 Keyboarding and Shorthand

**Keyboarding and Shorthand** is the study of shorthand, typing, and word processing. It includes the study of the principles and practice of data entry and retrieval.

## Subjects studied include:

Shorthand

**English Grammar and Punctuation** 

Correspondence Standards

**Typing** 

**Data Entry** 

#### Skills learnt include:

- · typing and taking shorthand at speed
- operating keyboards and general office equipment
- · using word processing packages
- · entering and retrieving data
- performing general office procedures

## Examples of qualifications include:

- 5 122 Associate Diploma in Secretarial Studies Associate Diploma in Court Reporting
- 7 122 Certificate in Shorthand Certificate in Keyboarding

## 129 Management Support Services, nec

Management Support Services, nec is the study of all Management Support Services not elsewhere classified in Narrow Field 12 Management Support Services.

Examples of qualifications include:

7 129 Certificate in Comptometry
Business Machining Certificate
Certificate in Telephony
Certificate in Reception

## Sales and Marketing

Sales and Marketing is the study of identifying and developing markets, and promoting and selling goods and services.

The focus of courses in Sales and Marketing is retail and wholesale operations, merchandising and distribution systems, marketing strategies, salesmanship and the identification of consumer needs and behaviour.

Courses of study in Sales and Marketing aim to develop:

- an understanding of the theories of buying and selling goods and services and their application at an organisational and personal level
- an understanding of marketing theories in relation to product development and the development of strategic marketing plans
- an understanding of consumer behaviour
- the ability to plan, direct and organise retail and wholesale operations so that goods and services can be provided efficiently and effectively

Fields of study in this narrow field are classified into the following detailed fields:

- 131 Wholesale and Retail Sales
- 132 Marketing
- 133 Real Estate
- 134 Tourism
- 139 Sales and Marketing, nec

## 131 Wholesale and Retail Sales

Wholesale and Retail Sales is the study of buying and selling goods and services, including stock management, merchandising, pricing practice, loss prevention, sales systems and procedures. It includes the study of the workings and current trends of the wholesale and retail industries.

Subjects studied include:

Accounting

**Basic Statistics** 

**Behavioural Studies** 

**Business Law and Computing** 

**Economics** 

Marketing

Purchasing

Sales Management

Salesmanship

Sales Supervision

Warehouse Management

## Skills learnt include:

 applying the principles and practices of selling and interacting with clients  managing stock, merchandising, pricing and supervising loss prevention

Examples of qualifications include:

- 3 131 Bachelor of Business in Retailing
- 5 131 Associate Diploma in Retailing
- 7 131 Certificate in Retailing Certificate in Sales

## 132 Marketing

Marketing is the study of exchange processes of goods and services between organisations and/or individuals, and the study of consumer behaviour and requirements. It includes the study of the role of product development, pricing, distribution, promotion and sales in order to maximise business performance.

Subjects studied include:

Accounting

**Applied Marketing** 

**Business Law** 

**Buyer Behaviour** 

**Economics** 

Entrepreneurial Management
Financial Decision Making
Introduction to Management
Marketing Law
Theory and Practice of Marketing
Marketing Support Systems
Pricing for Marketing
Product Management
Statistics

## Skills learnt include:

- applying social and behavioural science theories to identify and develop marketing strategies
- identifying consumer needs and wants and developing strategies to fulfil them in relation to the provision, pricing and distribution of goods and services
- organising advertising, promotion, public relations and sales campaigns

## Examples of qualifications include:

- 1 132 Master of Business in Marketing Master of Commerce in Marketing
- 2 132 Graduate Diploma in Marketing
- 3 132 Bachelor of Business in Marketing Bachelor of Commerce in Marketing
- 5 132 Associate Diploma in Marketing Associate Diploma of Applied Science in Wool and Fibre Marketing
- 7 132 Certificate in Marketing

#### 133 Real Estate

**Real Estate** is the study of developing, purchasing, selling and valuing land, buildings, businesses and properties. It includes the study of land use planning, real estate law, property investment and management.

#### Subjects studied include:

Accounting Practice for Land and Business Agents Bookkeeping for Land and Business Agents Commercial and Property Law Communications Information Systems

Listing and Selling Management

Morketina

Marketing

Office Procedures

Real Estate Law

Valuation

#### Skills learnt include:

- applying the principles and practices of real estate valuation and property investment
- using accounting, business practices and qualitative methods in the day to day operation of an estate agency

- applying the principles and practice of property management
- · marketing and selling

## Examples of qualifications include:

- 2 133 Graduate Diploma in Property
- 3 133 Bachelor of Applied Science in Land Economics Bachelor of Business in Property
- 4 133 Diploma in Land Valuation
  Diploma in Real Estate Management
- 5 133 Associate Diploma of Business in Real Estate Valuation

Advanced Certificate in Real Estate

- 6 133 Certificate in Real Estate
- 7 133 Certificate in Real Estate Management Certificate in Land Broking

#### 134 Tourism

**Tourism** is the study of marketing and advertising tourist destinations and events. It includes the study of ticketing and reservation practices.

## Subjects studied include:

Airfares and Ticketing

**Behavioural Studies** 

Communication Skills

Geography

Languages and Culture

Recreation and Leisure

Sales and Consultancy Skills

Travel Agency Practice

#### Skills learnt include:

- marketing and promoting tourist travel, accommodation and facilities
- providing information and advice to clients regarding itineraries, destinations and accommodation
- arranging accommodation and travel

#### Examples of qualifications include:

- 1 134 Master of Business in Tourism Development
- 2 134 Graduate Diploma in Australian Tourism Graduate Diploma of Business in Tourism
- 3 134 Bachelor of Arts in Tourism Bachelor of Business in Tourism
- 4 134 Diploma of Business in Tourism
- 5 134 Associate Diploma of Business in Travel and Tourism

Advanced Certificate in Travel and Tourism

7 134 Certificate in Travel

Certificate in Travel Consulting

## 139 Sales and Marketing, nec

**Sales and Marketing**, nec is the study of all Sales and Marketing not elsewhere classified in Narrow Field 13 Sales and Marketing.

- 1 139 Master of Arts in Advertising
- 3 139 Bachelor of Business in Advertising Bachelor of Business in International Trade
- 5 139 Associate Diploma of Business in International Trade
  - Associate Diploma in Visual Merchandising
- 6 139 Certificate in Advertising Certificate in Window Dressing
- 7 139 Certificate in Merchandising
  Certificate in Export Management
  Certificate in Auctioneering Practice
  Traineeship Certificate in Advertising
  Certificate in Visual Display

## **Financial Services**

**Financial Services** is the study of planning, directing, organising and controlling financial activities and services. It includes the control and monitoring of the financial resources of organisations, institutions and individuals, and the provision of financial services at the corporate and individual level.

The focus of qualifications in Financial Services is monetary systems, financial planning, investment and savings, and the maintenance of corporate and personal financial records.

Courses of study in Financial Services aim to develop:

- an understanding of the theories and practice of financial planning and investment
- an understanding of the nature and operation of the Australian and international monetary and financial systems and markets
- an understanding of accounting principles and processes in order to organise and maintain corporate and personal financial records
- an understanding of the principles of insurance
- interpreting, evaluating and preparing financial records for use in corporate and personal financial decision making

Fields of study in this narrow field are classified into the following detailed fields:

- 141 Accounting
- 142 Banking and Finance
- 143 Insurance
- 149 Financial Services, nec

## 141 Accounting

**Accounting** is the study of maintaining, auditing and recording financial transactions.

Subjects studied include:

Administrative Studies

Accounting (General and Corporate)

**Business Law** 

**Business Statistics** 

**Business Systems and Applications** 

Company Law

**Economics** 

Mathematics and Statistics

**Taxation** 

**Taxation Law** 

## Skills learnt include:

- designing and operating financial systems for individuals and organisations
- preparing general purpose accounting statements

- auditing financial accounts and providing reports on those audits
- providing advice on taxation law and practice and completing taxation reports for clients

- 1 141 Master of Commerce in Accounting Master of Arts in Accounting
- 2 141 Graduate Diploma in Internal Auditing Graduate Diploma in Taxation
- 3 141 Bachelor of Business in Accounting Bachelor of Commerce in Accounting
- 4 141 Diploma in Accounting
- 5 141 Associate Diploma of Business in Accounting Advanced Certificate in Accounting
- 7 141 Certificate in Bookkeeping
  Certificate in Taxation Practice

## 142 Banking and Finance

Banking and Finance is the study of directing, planning and providing financial institution services in relation to savings, loans and investments. It includes the study of banking and lending practices, the day to day operation of banks and financial institutions, finance theories and the regulation of national and international financial markets.

#### Subjects studied include:

Accounting

Australian Law

**Business Law** 

Communication

Corporate Finance

**Economics** 

**Funds Management** 

International Trade

Mathematics and Statistics

#### Skills learnt include:

- · providing basic financial services
- developing appropriate investment strategies for different types of investor
- organising and operating financial institutions

## Examples of qualifications include:

1 142 Master of Applied Finance

Master of Commerce in Finance

2 142 Graduate Diploma in Finance

Graduate Diploma in Banking and Finance

3 142 Bachelor of Business in Banking and Finance Bachelor of Commerce in Financial Administration

4 142 Diploma in Financial Management

5 142 Associate Diploma of Business in Banking and Finance

Advanced Certificate in Banking and Finance

7 142 Certificate in Credit Management Certificate of Proficiency in Banking

#### 143 Insurance

Insurance is the study of directing, planning and providing insurance services in relation to life, disability, property, liability, and other contingencies. It includes the study of the principles of risk, insurance and reinsurance, underwriting and actuarial principles, and the day to day operation of insurance organisations.

#### Subjects studied include:

Accounting

**Business Law** 

Computing

**Economics** 

General Insurance

**Information Systems** 

Insurance Broking and Law

Insurance Sales and Customer Service

Principles of Risk and Insurance

Reinsurance

Risk Management

Superannuation Planning

Taxation and Estate Planning

#### Skills learnt include:

- developing appropriate insurance, superannuation and retirement packages for clients
- applying the principles of risk, insurance, reinsurance, and underwriting to determine benefits and premiums
- organising and operating insurance organisations
- processing claims, maintaining and verifying insurance records

## Examples of qualifications include:

- 3 143 Bachelor of Business in Insurance
- 5 143 Advanced Certificate in Insurance Administration
- 7 143 Certificate in Insurance Certificate in Insurance Administration

## Exclusions:

Actuarial Studies is excluded from this detailed field as it is more concerned with the application of statistical principles to financial planning than insurance. It is included in Detailed Field 532 Statistics.

## 149 Financial Services, nec

**Financial Services**, nec is the study of all Financial Services not elsewhere classified in Narrow Field 14 Financial Services.

- 2 149 Graduate Diploma in Business Forecasting Graduate Diploma in Securities
- 4 149 Diploma in Securities
- 6 149 Certificate in Securities

# Broad Field 2 Health

**Health** is the study of maintaining and restoring the physical and mental well-being of humans and other animals.

The theoretical content of Broad Field 2 Health includes:

- biomedical science
- behavioural science
- · community health
- clinical science

The main purpose of this broad field of study is to develop an understanding of the bodily structures and functions of humans and other animals, the principles and techniques of identifying and classifying diseases which affect them, and the scientific and behavioural knowledge that is essential to the maintenance and restoration of health.

Fields of study in this broad field are classified into the following narrow fields:

- 21 Medicine
- 22 Nursing
- 23 Health Science
- 24 Dental Studies
- 25 Veterinary Studies
- 29 Other Health

## **Exclusions:**

Welfare is excluded from this broad field as it is more concerned with social and economic aspects of the well-being of people than with health. It is included in Narrow Field 42 Welfare.

## Inclusions:

Veterinary Studies is included in this broad field as it is concerned with the prevention, diagnosis, care and treatment of diseases, ailments and injuries in animals.

## Medicine

**Medicine** is the study of the principles and procedures used in preventing, diagnosing, caring for and treating illness, disease and injury in humans, and the maintenance of general health.

The focus of qualifications in medicine is disease processes and mechanisms, the structure and function of the human body and mind, the restoration and maintenance of health, pain control, human behaviour and medical ethics.

Courses of study in Medicine aim to develop:

- an understanding of the normal and abnormal growth, development and functioning of the human body and mind
- an understanding of medical, surgical and pain control principles and procedures used in the observation, diagnosis, care and treatment of illness, disease and injury
- an understanding of pregnancy and childbirth, ante and post natal care, and obstetric emergencies
- an understanding of the interaction between humans and their physical, biological and social environment
- · an understanding of professional responsibility in relation to individuals and the community
- the ability to assess and evaluate clinical observations to arrive at diagnoses and determine appropriate courses
  of action

Fields of study in this narrow field are classified into the following detailed fields:

- 211 General Medicine
- 212 Surgery
- 213 Psychiatry
- 214 Obstetrics and Gynaecology
- 215 Anaesthesiology
- 216 Pathology
- 217 Radiology
- 218 Internal Medicine
- 219 Medicine, nec

## 211 General Medicine

General Medicine is the study of providing primary and continuing medical care to patients. It is situated mainly in the community and is particularly concerned with providing family and community oriented health care.

Subjects studied include:

Anatomy

**Behavioural Sciences** 

**Biomedical Science** 

Clinical Physiology

Community Practice

Health, Law and Ethics

Histology and Embryology

Microbiology and Immunology

**Paediatrics** 

Pathology

Obstetrics and Gynaecology

Social and Preventive Medicine

Surgery

#### Skills learnt include:

- prescribing and administering medication
- carrying out simple surgical procedures and dealing with medical emergencies
- communicating with patients, their relatives and other medical and health professionals

## Examples of qualifications include:

- 1 211 Fellow of the Royal Australian College of General Practitioners (FRACGP)
- 3 211 Bachelor of Medicine

Bachelor of Medicine and Bachelor of Surgery (MBBS)

## 212 Surgery

**Surgery** is the study of the medical specialisation concerned with the principles and techniques for treating diseases, injuries, defects and deformities by manual operation and manipulation, and by using instruments and appliances.

## Subjects studied include:

General Surgery
Opthalmology and Ear, Nose and Throat Surgery
Orthopaedic Surgery
Principles and Practices of Surgery
Surgical Diagnosis
Surgical Pathology

#### Skills learnt include:

- · applying surgical procedures
- communicating with patients, their relatives and other medical and health professionals
- · monitoring post-operative progress of patients

## Examples of qualifications include:

1 212 Fellow of the Royal Australasian College of Surgeons (FRACS)

## 213 Psychiatry

**Psychiatry** is the study of the medical specialisation concerned with diagnosing, preventing, and treating diseases and disorders of the mind.

#### Subjects studied include:

Child Psychiatry
Developmental Psychiatry
Neurology and Neuropathology
Psychiatric Syndromes and Phenomena
Psychotherapy

#### Skills learnt include:

- assessing patients' psychological states
- communicating with patients, their relatives and other medical and health professionals
- practising professional responsibility in relation to individuals and the community
- planning and implementing programmes for treating and preventing psychiatric disorders
- prescribing and administering medication

## Examples of qualifications include:

1 213 Fellow of the Royal Australian and New Zealand College of Psychiatrists (FRANZCP)

## 214 Obstetrics and Gynaecology

Obstetrics and Gynaecology is the study of the medical specialisation concerned with the care of women during pregnancy, labour and after childbirth, and neonates; and the prevention, diagnosis and treatment of diseases of the female reproductive system.

## Subjects studied include:

Anatomy of the Female Pelvis
Foetal Growth and Development
Infertility
Neonatology
Pelvic Infections
Reproductive Endocrinology

#### Skills learnt include:

- · treating gynaecological and obstetric conditions
- monitoring foetal development and providing advice on nutrition and exercise
- communicating with patients, their relatives and other medical and health professionals

## Examples of qualifications include:

1 214 Fellow of the Royal Australian College of
 Obstetricians and Gynaecologists (FRACOG)
 Member of the Royal College of Obstetricians
 and Gynaecologists (MRCOG)

2 214 Diploma of the Australian College of Obstetricians and Gynaecologists

## 215 Anaesthesiology

Anaesthesiology is the study of the medical specialisation concerned with the administration of drugs and other substances to achieve lack of sensation with or without loss of consciousness.

## Subjects studied include:

Neuroanatomy Pharmacological Effects of Anaesthetics Pre-operative Assessment Principles and Practices of Anaesthesiology Regional Analgesia

#### Skills learnt include:

- administering anaesthetics
- operating and monitoring anaesthetic equipment
- observing and monitoring an anaesthetised patient and taking remedial action to counter adverse reactions and complications
- communicating with patients, their relatives and other medical and health professionals

Examples of qualifications include:

1 215 Fellow of the Faculty of Anaesthetists of the Royal Australasian College of Surgeons (FFARACS)

2 215 Diploma in Anaesthesia

## 216 Pathology

**Pathology** is the study of the medical specialisation concerned with the causes and effects of diseases, including the structural and functional changes of body organs, tissues and fluids, and the systematic methods of detecting these changes.

## Subjects studied include:

Bacteriology

Haematology

**Immunology** 

Microbiology

Parasitology

**Pathogenesis** 

Pathological Anatomy

#### Skills learnt include:

- interpreting and evaluating pathology tests
- communicating with other medical and health professionals
- examining specimens to determine the origin, nature and course of any disease present

#### Examples of qualifications include:

1 216 Fellow of the Royal College of Pathologists of Australia (FRCPA)

2 216 Diploma in Clinical Pathology

## 217 Radiology

Radiology is the study of the medical specialisation concerned with the use of radioactive substances, X-rays and other ionising radiations in obtaining images of various organs and structures in the body to diagnose, treat and follow the course of disease and its response to treatment.

## Subjects studied include:

Electro-technology Photographic Aspects of Radiography Physiological Effects of Radioisotopes Radiation Therapy Radiological Diagnosis

#### Skills learnt include:

- interpreting and evaluating medical images
- communicating with patients, their relatives and other medical and health professionals
- treating tumours by exposure to high energy ionising radiation

## Examples of qualifications include:

1 217 Fellow of the Royal Australasian College of Radiologists (FRACR)

2 217 Graduate Diploma in Radiology

## 218 Internal Medicine

**Internal Medicine** is the study of the medical specialisation concerned with the diagnosis and treatment of diseases and disorders of specific internal bodily structures and functions.

## Subjects studied include:

Aetiology

Anatomy

Clinical Microbiology and Immunology Pharmacological Effects of Drugs

## Skills learnt include:

- communicating with patients, their relatives and other medical and health professionals
- · prescribing and administering medication
- advanced diagnosis of diseases and disorders of internal bodily structures

#### Examples of qualifications include:

1 218 Fellow of the Royal Australasian College of Physicians (FRACP)

## 219 Medicine, nec

Medicine, nec is the study of all Medicine not elsewhere classified in Narrow Field 21 Medicine.

## Examples of qualifications include:

 1 219 Fellow of the Australasian College of Dermatologists (FACD)
 Fellow of the Royal Australian College of Opthalmologists (FRACO)

2 219 Diploma in Laryngology Diploma in Dermatology Diploma in Ophthalmology

## Nursing

**Nursing** is the study of providing health care for the sick, disabled or infirm and assisting physicians and other medical and health professionals diagnose and treat patients.

The focus of qualifications in nursing is maintaining and caring for the health of individuals, families and communities during illness and rehabilitation, and nursing ethics.

Courses of study in Nursing aim to develop:

- · an understanding of disease processes and mechanisms and their clinical manifestations and treatment
- an understanding of the nursing principles and practices used in caring for the sick, disabled, infirm and those with psychiatric disorders
- an understanding of pregnancy and childbirth, ante and post natal care, and obstetric emergencies
- an understanding of the normal growth and development of babies and young children
- an understanding of the interaction between humans and their physical, biological and social environment
- · an understanding of professional responsibility in relation to individuals and the community

Fields of study in this narrow field are classified into the following detailed fields:

- 221 Basic Nursing
- 222 Midwifery
- 223 Mothercraft Nursing
- 224 Psychiatric Nursing
- 225 Community Nursing
- 229 Nursing, nec

#### **Exclusions:**

Veterinary Nursing is excluded from this narrow field as it is more concerned with the basic physical care of sick and infirm animals. It is included in Detailed Field 252 Veterinary Assisting.

## 221 Basic Nursing

**Basic Nursing** is the study of the basic physical care of the sick and infirm in hospitals and institutions.

#### Subjects studied include:

**Behavioural Sciences** 

Clinical Practice

Human Bioscience

Lifestyle and Health

Microbiology

Nursing in Society

Physical Science

Theatre Nursing

#### Skills learnt include:

- observing, monitoring, evaluating and reporting changes in a patient's condition
- communicating with patients, their relatives and other medical and health professionals
- educating patients, relatives and the general community about health care
- administering medications and treatments as directed

- 3 221 Bachelor of Applied Science in Nursing
- 4 221 Diploma of Applied Science in Nursing Registered Nurse
- 7 221 Enrolled Nurse

## 222 Midwifery

**Midwifery** is the study of the nursing specialisation concerned with the physical care of women, foetuses and neonates during pregnancy, labour and after childbirth.

#### Subjects studied include:

**Bioethics** 

Birth Processes

Childbirth

Health Education

Post Natal and Neonatal Period

Pregnancy

#### Skills learnt include:

- assisting at and conducting deliveries
- observing, monitoring, evaluating and reporting changes in a patient's condition
- communicating with patients, their relatives and other medical and health professionals
- educating parents during pregnancy and the post-natal period
- administering medications and treatments as directed

## Examples of qualifications include:

2 222 Graduate Diploma in Midwifery Graduate Diploma of Advanced Nursing in Midwifery

3 222 Bachelor of Applied Science in Advanced Nursing (Midwifery)

## 223 Mothercraft Nursing

**Mothercraft Nursing** is the study of the nursing specialisation concerned with the physical care of mothers and their children aged up to four years.

#### Subjects studied include:

Community Nursing

Health Education and Promotion

Infant and Child Care

Life Cycle

Maternal Care

Nutrition in Health and Disease

Physiology

Psychology

Sociology

## Skills learnt include:

- observing, monitoring, evaluating and reporting changes in the development and progress of infants
- communicating with parents and other medical and health professionals
- educating parents about feeding, hygiene and the care of children to four years of age

Examples of qualifications include:

4 223 Diploma in Mothercraft

7 223 Certificate in Mothercraft Certificate in Infant Welfare

## 224 Psychiatric Nursing

**Psychiatric Nursing** is the study of the nursing specialisation concerned with the physical and mental care of persons with psychiatric disorders.

## Subjects studied include:

Behaviour Therapy

Child and Adolescent Psychiatric Disorders

Family and Group Therapy

Issues and Trends in Mental Health

Life Science

Psychology

Skills in Human Interaction

Sociology

#### Skills learnt include:

- observing, monitoring, evaluating and reporting a patient's condition
- counselling patients and providing supportive therapy
- communicating with patients, their relatives and other medical and health professionals
- supervising and administering medications, personal hygiene and nutrition

## Examples of qualifications include:

2 224 Graduate Diploma in Psychiatric Nursing

5 224 Associate Diploma in Psychiatric Nursing

## 225 Community Nursing

Community Nursing is the study of the nursing specialisation concerned with the physical care of the sick and infirm in the community.

## Subjects studied include:

**Educational Interactions** 

**Epidemiology** 

Health Education and Promotion

Life Cycle

Nutrition in Health and Disease

Physiology

Psychology

Sociology

## Skills learnt include:

- communicating with patients, their relatives and other medical and health professionals
- observing, monitoring, evaluating and reporting changes in a patient's condition
- educating patients, relatives and the general community about health care

## Examples of qualifications include:

- 2 225 Graduate Diploma of Nursing in Community Health
- 3 225 Community Health Nursing

## 229 Nursing, nec

**Nursing, nec** is the study of all Nursing not elsewhere classified in Narrow Field 22 Nursing.

Examples of qualifications include:

3 229 Certificate in Geriatric Nursing Certificate in Intensive Care Nursing Certificate in Oncological Nursing

## Health Sciences

**Health Sciences** is the study of physical disorders, treating diseases and maintaining the physical well-being of humans using non-surgical procedures.

The focus of qualifications in Health Sciences is health problems of the eyes, muscles and locomotor system, pharmacology, nutrition and rehabilitation.

Courses of study in Health Sciences aim to develop:

- an understanding of the properties of drugs and medical products and their manufacture, control and use in the community and hospitals
- · an understanding of normal and abnormal movement and mobility, and the musculo-skeletal system
- an understanding of the principles and practice of rehabilitation using a variety of creative activities
- an understanding of the principles and practice of radiographic imaging and treatment
- an understanding of the physiology of the eye and the operation of vision testing apparatus
- an understanding of the development of speech and its interrelationship with language and personality development
- an understanding of human nutritional requirements

Fields of study in this narrow field are classified into the following detailed fields:

- 231 Pharmacy
- 232 Physiotherapy
- 233 Occupational Therapy
- 234 Radiography
- 235 Optometry
- 236 Chiropractic
- 237 Speech Pathology
- 238 Nutrition and Dietetics
- 239 Health Science, nec

## 231 Pharmacy

**Pharmacy** is study of drugs and their effects on humans. It includes their preparation, dispensing and administration.

Subjects studied include:

**Biochemistry** 

Chemistry

Clinical Pharmacy and Therapeutics

Forensic Pharmacy

Human Behaviour

Microbiology

Pharmaceuticals

Pharmacology

Pharmacy Administration and Practice

#### Skills learnt include:

- preparing and dispensing medications to patients with regard to legal, therapeutic and professional requirements
- communicating with patients and other medical and health professionals
- testing and analysing drugs to determine identity, purity and strength
- providing information and advising patients and the general community on drugs and medications

- 1 231 Master of Science in Pharmacology Master of Pharmacy
- 2 231 Graduate Diploma in Clinical Pharmacy Graduate Diploma in Hospital Pharmacy
- 3 231 Bachelor of Pharmacy Bachelor of Science in Pharmacology

# 232 Physiotherapy

**Physiotherapy** is the study of restoring normal physical movement to those incapacitated by temporary or permanent physical disability.

#### Subjects studied include:

**Behavioural Science** 

**Biomechanics** 

Cardiopulmonary Physiotherapy

**Electrophysical Agents** 

**Human Biology** 

Kinesiology

Musculo-skeletal Physiotherapy

Neurobiology

#### Skills learnt include:

- teaching, assisting and monitoring a patient's progress in learning or relearning the skills of normal function
- communicating with patients, their relatives and other medical and health professionals
- selecting appropriate forms of therapy, and advising and instructing on the use of mobility aids
- educating the community in the prevention of movement disorders

#### Examples of qualifications include:

- 1 232 Master of Applied Science in Physiotherapy
- 2 232 Graduate Diploma in Manipulative Therapy Graduate Diploma in Sports Physiotherapy
- 3 232 Bachelor of Applied Science in Physiotherapy Bachelor of Health Science in Physiotherapy Bachelor of Physiotherapy

### 233 Occupational Therapy

Occupational Therapy is the study of treating physical and psychiatric conditions through creative activities in order to maximise the level of function and independence in daily life.

#### Subjects studied include:

Applied Physiology

**Behavioural Sciences** 

Interpersonal Studies

Lifestyle and Lifespan Development

Musculo-skeletal Biomechanics and Anatomy

Neurobiology

Occupational Performance

Occupational Therapy and Process

Physiological Principles

#### Skills learnt include:

- evaluating and interpreting a patient's emotional, psychological, developmental and physical capabilities
- planning and administering treatment programmes on an individual or group basis
- monitoring and recording patients' activities, responses and progress
- communicating with patients, their relatives and other medical and health professionals

#### Examples of qualifications include:

1 233 Master of Applied Science in Occupational Therapy

Master of Occupational Therapy

- 2 233 Graduate Diploma in Occupational Therapy
- 3 233 Bachelor of Applied Science in Occupational Therapy

Bachelor of Health Science in Occupational Therapy

5 233 Associate Diploma in Diversional Therapy

# 234 Radiography

Radiography is the study of technologies which use ionising and non-ionising (e.g. ultrasound) radiation for producing diagnostic images and administering radiation therapy.

#### Subjects studied include:

Behavioural Sciences

**Biological Sciences** 

Contrast Media

**Imaging** 

Instrumentation

Medical Radiation Applications and Principles

Nuclear Medicine

Physiology

**Radiation Physics** 

Radiological Anatomy

Radiopharmacy

Radiotherapy

Sonography

**Tumour Pathology** 

#### Skills learnt include:

- preparing radioactive materials and operating imaging, ultrasound and X-ray equipment
- positioning patients, screens and equipment accurately
- calculating duration and intensity of radiation doses
- communicating with patients, their relatives and other medical and health professionals

Examples of qualifications include:

2 234 Graduate Diploma in Medical Imaging

3 234 Bachelor of Applied Science in Medical Radiations

Bachelor of Applied Science in Therapeutic Radiography

4 234 Diploma of Applied Science in Medical Radiography

Diploma in Diagnostic Radiography Diploma in Radiological Technology

5 234 Associate Diploma in Diagnostic Radiography

7 234 Certificate in Diagnostic Radiography

# 235 Optometry

**Optometry** is the study of measuring and assessing vision, and prescribing lenses for visual correction. It includes the study of preparing and dispensing corrective lenses.

#### Subjects studied include:

**Applied Optics** 

Biochemistry

**Biology** 

Diseases and Disorders of the Eye

General Pathology

Histology

Neuro-Physiology of Vision

Ocular Pharmacology

**Opthalmic Prosthetics** 

Physics

Public Health Optometry

# Skills learnt include:

- performing examinations and visual tests in order to assess the nature and extent of vision problems and abnormalities
- prescribing, preparing and dispensing visual aids
- operating vision testing apparatus
- advising patients on eye exercises, lighting and visual habits

#### Examples of qualifications include:

1 235 Master of Science in Optometry Master of Optometry

3 235 Bachelor of Optometry

Bachelor of Science in Optometry

6 235 Certificate in Optical Dispensing
Trade Certificate in Optical Mechanics
Apprenticeship in Optical Fitting and Surfacing

# 236 Chiropractic

**Chiropractic** is the study of relieving disorders of the body through manipulating and treating the musculo-skeletal system.

#### Subjects studied include:

Anatomy

**Biochemistry** 

**Biomechanics** 

Chiropractic Science

Microbiology and Pathology

Osteopathic Science

Physiology

Radiology

#### Skills learnt include:

- treating as a result of evaluating and interpreting clinical observations
- communicating with patients, their families and other medical and health professionals
- performing manipulation and adjustment
- advising patients and their families about posture, and preventative and corrective exercises

# Examples of qualifications include:

1 236 Master of Science in Chiropractic

3 236 Bachelor of Applied Science in Chiropractic

# 237 Speech Pathology

**Speech Pathology** is the study of treating speech and language disorders.

#### Subjects studied include:

Audiology

**Behavioural Studies** 

**Biological Sciences** 

Linguistics

**Phonetics** 

Speech Pathology

#### Skills learnt include:

- planning and conducting programmes of remedial exercises to correct stuttering, abnormal articulation and other disorders
- communicating with patients, their relatives and other medical and health professionals
- treating as a result of evaluating and interpreting clinical observations
- conducting individual and group therapy sessions for rehabilitating patients with communication problems

Examples of qualifications include:

- 1 237 Master of Applied Science in Speech Pathology
- 2 237 Graduate Diploma in Speech Pathology
- 3 237 Bachelor of Applied Science in Speech
  Pathology
  Bachelor of Speech Therapy

### 238 Nutrition and Dietetics

**Nutrition and Dietetics** is the study of the nutritional and dietary needs of humans.

#### Subjects studied include:

Applied Nutrition

Biochemistry

Community Nutrition

Food Science

Foundations of Nutrition

Large Scale Feeding

Microbiology

Physiology

Therapeutic Dietetics

#### Skills learnt include:

- advising and counselling individuals and groups about diet and nutrition
- supervising and organising large-scale food serving programmes, and preparing special diets for people with certain dietary needs, particularly those in hospitals and welfare institutions
- · educating and training food service personnel
- communicating with patients, their relatives, other medical and health professionals and the general community

#### Examples of qualifications include:

- 1 238 Master of Nutrition and Dietetics
  Master of Science in Human Nutrition
- 2 238 Graduate Diploma in Nutrition and Dietetics Graduate Diploma in Dietetics
- 3 238 Bachelor of Science in Nutrition
  Bachelor of Nutrition and Dietetics

# 239 Health Science, nec

**Health Science, nec** is the study of all Health Science not elsewhere classified in Narrow Field 23 Health Science.

- 1 239 Master in Audiology
- 2 239 Graduate Diploma in Audiology
   Graduate Diploma of Applied Science in Rehabilitation
   Graduate Diploma in Sports Science
- 3 239 Bachelor of Applied Science in Osteopathy Bachelor of Applied Science in Podiatry Bachelor of Human Movement Studies
- 4 239 Diploma in Acupuncture
  Diploma in Chiropody
  Diploma of Applied Science in Orthoptics
- 5 239 Associate Diploma of Applied Science in Remedial Massage
  Associate Diploma in Podiatry
  Associate Diploma of Applied Science in Exercise Science
  Associate Diploma Anaesthetic Technician Associate Diploma Orthopaedic Technician
- 6 239 Certificate in Audiometry Certificate in Trichology

# **Dental Studies**

**Dental Studies** is the study of diagnosing, treating and preventing diseases and abnormalities of the teeth and adjacent tissues. It includes the study of designing, making and repairing dental prostheses and orthodontic appliances.

The focus of qualifications in Dental Studies is dental health, hygiene, technology and the prevention and treatment of disease, pain control, the structure and function of teeth and gums and client care during treatment.

Courses of study in Dental Studies aim to develop:

- an understanding of the normal growth, development and maintenance of healthy teeth and adjacent tissue
- an understanding of dental, surgical and pain control principles and procedures used in the care, treatment and replacement of teeth
- an understanding of the technology and techniques of designing, making and repairing dental prostheses and orthodontic appliances
- the ability to assess and evaluate clinical observations to arrive at diagnoses and determine the appropriate courses of action

Fields of study in this narrow field are classified into the following detailed fields:

- 241 Dental Science
- 242 Dental Assisting
- 243 Dental Technology

#### 241 Dental Science

**Dental Science** is the study of diagnosing, treating and preventing diseases of the teeth and adjacent tissues. It includes correcting malocclusions, restoring and replacing missing dental and oral structures.

#### Subjects studied include:

**Behavioural Sciences** 

Biochemistry

Biology

Chemistry

Conservative and Restorative Dentistry

Children's Dentistry

Oral Anatomy

Oral Medicine and Surgery

Oral Pathology

Orthodontics

Pain Control

Periodontology

Pharmacology

Physiology

#### Skills learnt include:

- filling cavities, extracting teeth, constructing inlays and artificial crowns, performing bridge work and fitting dentures and other appliances
- administering anaesthetics
- using dental instruments and equipment
- diagnosing as a result of evaluating and interpreting clinical observations
- educating patients about dental health and oral hygiene

# Examples of qualifications include:

1 241 Master of Dental Science

Master of Science in Dentistry

2 241 Graduate Diploma in Orthodontics

Graduate Diploma in Clinical Dentistry

3 241 Bachelor of Dental Science

**Bachelor of Dental Surgery** 

Bachelor of Science in Dentistry

# 242 Dental Assisting

**Dental Assisting** is the study of providing assistance to dentists. It includes dental health education, X-rays and the basic care of teeth and adjacent tissue.

#### Subjects studied include:

Anatomy and Physiology of the Head and Neck

Community Health Services

**Dental Health Education** 

Dental Hygiene

Diet and Nutrition

Microbiology

Oral Histology and Embryology

Pathology

Pharmacology

Preventive Dentistry

Psychology

#### Skills learnt include:

- assisting with basic dental procedures including cleaning, polishing, filling and extracting teeth
- maintaining and preparing dental materials and equipment
- educating patients and the community about dental health and oral hygiene

### Examples of qualifications include:

5 242 Associate Diploma in Dental Hygiene Associate Diploma in Dental Therapy Associate Diploma in Dental Nursing

7 242 Certificate in Dental Assisting

# 243 Dental Technology

**Dental Technology** is the study of designing, making and repairing dental prostheses and orthodontic appliances.

#### Subjects studied include:

Applied Pathology for Dental Technicians Biology

Chemistry

Dental Anatomy and Physiology

Dental Laboratory Management

**Dental Laboratory Practice** 

Dental Metallurgy and Material Science

#### Skills learnt include:

- designing, making and repairing dental prostheses and orthodontic appliances
- applying basic business concepts

- 5 243 Associate Diploma in Dental Technology
- 6 243 Trade Certificate in Dental Mechanics Apprenticeship in Dental Technology
- 7 243 Certificate in Dental Technology

# **Veterinary Studies**

Veterinary Studies is the study of preventing, diagnosing, and treating diseases and injuries in animals, and their general care.

The focus in Veterinary Studies is the structure and function of animals, disease processes and mechanisms, pain control, and the prevention and spread of animal diseases.

Courses of study in Veterinary Studies aim to develop:

- an understanding of the normal growth, development and functioning of animals including their nutritional needs, behaviour, breeding and care
- an understanding of veterinary, surgical and pain control principles and procedures used in the prevention, diagnosis, care and treatment of illness, disease and injury in animals
- · an understanding of the veterinary obligations to the community regarding public health
- an understanding of the principles and practice used in nursing sick, infirm and injured animals
- the ability to assess and evaluate clinical observations to arrive at diagnoses and determine the appropriate courses of action

Fields of study in this narrow field are classified into the following detailed fields:

- 251 Veterinary Science
- 252 Veterinary Assisting

# 251 Veterinary Science

**Veterinary Science** is the study of diagnosing and treating animal diseases, ailments and injuries, and preventing and containing the spread of animal diseases. It includes the study of animal reproduction.

# Subjects studied include:

Anatomy

Animal Husbandry

Animal Nutrition

Biochemistry

**Biology** 

Chemistry

Clinical Services

Genetics

Histology

Microbiology

Parasitology

Pastoral Botany

Pathology

Pharmacology and Toxicology

**Physics** 

Physiology and Surgery

#### Skills learnt include:

- diagnosing and treating as a result of evaluating and interpreting clinical observations and tests
- applying medical and surgical procedures to animals
- advising clients about the care of animals
- administering and prescribing drugs and treatments
- · administering anaesthetics

#### Examples of qualifications include:

1 251 Master of Veterinary Studies

Master of Science in Veterinary Science

2 251 Graduate Diploma in Veterinary Anaesthetics Graduate Diploma in Veterinary Clinical Studies Graduate Diploma of Science in Tropical Veterinary Science

3 251 Bachelor in Veterinary Science Bachelor of Veterinary Medicine and Science

# 252 Veterinary Assisting

Veterinary Assisting is the study of caring for sick, injured and infirm animals undergoing treatment in veterinary clinics. It excludes the diagnosis and surgical treatment of disease, ailment and injury.

#### Subjects studied include:

Anatomy and Physiology Animal Behaviour Animal Handling and Care Animal Health and Disease Animal Nursing Techniques Basics of Pharmacy Operating Theatre Techniques Radiographic Techniques Small Animal Care

#### Skills learnt include:

- observing, monitoring and reporting changes in an animal's condition
- · assisting with treating and caring for animals

Examples of specific fields of study include:

6 252 Certificate in Veterinary Nursing Certificate in Veterinary Assisting

# Other Health

Other Health is the study of all Health not included elsewhere in Broad Field 2 Health.

Fields of study in this narrow field are classified into the following detailed fields:

291 Ambulance Service

292 Occupational Health and Safety

299 Other Health, nec

#### 291 Ambulance Service

Ambulance service is the study of the emergency treatment of the sick and injured, and the transportation of patients to hospitals and other medical centres.

#### Subjects studied include:

Ambulance Principles and Practice

Basic and Clinical Science

**Biochemistry** 

**Biology** 

**Emergency Care** 

Patient Care Process (Medical/Surgical)

**Physics** 

Rescue

The Behaviourally Disturbed Patient

The Child Patient

The Pregnant Patient

#### Skills learnt include:

- operating emergency medical and rescue equipment
- administering first aid and emergency treatment
- evaluating, observing and monitoring patients' conditions
- thinking clearly, remaining calm and acting decisively in emergencies
- transporting patients to and from hospitals and other medical centres
- communicating with patients, the general public, members of other health professions and the police

# Examples of qualifications include:

5 291 Associate Diploma of Health Science - Ambulance Officer

7 291 Certificate of Applied Science - Ambulance Officer

# 292 Occupational Health and Safety

Occupational Health and Safety is the study of recognising, evaluating and controlling environmental factors associated with the workplace, which may cause illness, impaired health or diminished well-being amongst workers and the community.

#### Subjects studied include:

Communication

**Ergonomics** 

Hazards and Health

Industrial Relations

Introduction to Safety and Health

Occupational Hygiene Monitoring

Organisational Behaviour

Safety and Health Law

Social Aspects of Safety and Health

Training for Safety

#### Skills learnt include:

- evaluating, observing and recognising factors which may cause illness and inefficiency in workplaces and the community
- advising on measures to reduce injury and disease
- educating the community on health risks, safety procedures and techniques

# Examples of qualifications include:

2 292 Graduate Diploma in Risk Management Graduate Diploma of Applied Science in Occupational Health and Safety

Graduate Diploma in Occupational Hygiene

3 292 Bachelor of Applied Science in Occupational Health and Safety

5 292 Associate Diploma in Occupational Health and Safety

7 292 Certificate in Occupational Health and Safety

Associate Diploma of Applied Science in Occupational Health and Safety

# 299 Other Health, nec

Other Health, nec is the study of all Other Health not elsewhere classified in Narrow Field 29 Other Health.

- 1 299 Master of Public Health Master of Health Science in Community Health
- 2 299 Graduate Diploma in Epidemiology
  Graduate Diploma of Health Science in Health
  Education
  Graduate Diploma in Tropical Public Health
- 3 299 Bachelor of Applied Science in Environmental
   Health
   Bachelor of Environmental Health
   4 299 Diploma in Health Surveying
   5 299 Associate Diploma in Aboriginal Health and
   Development
- Associate Diploma in Health Surveying
  6 299 Trade Certificate in Health Inspection
  7 299 Certificate in Community Health and Care

# Broad Field 3 Education

**Education** is the study of the learning process, and the theories, methods and techniques of imparting knowledge and skills to others.

The theoretical content of Broad Field 3 Education includes:

- the development of children and adolescents
- · the psychology, philosophy and sociology of education
- the processes of learning and skill acquisition
- curriculum development
- communication
- teaching methods

The main purpose of this broad field is to develop an understanding of the processes and methods of teaching and learning in schools, tertiary educational institutions and informal settings.

Fields of study in this broad field are classified into the following narrow fields:

- 31 School Teacher Training
- 32 Post-School Teacher Training
- 39 Other Education

# School Teacher Training

**School Teacher Training** is the study of teaching and learning and its application to the education of young people between the ages of 3 and 18 years in pre-primary, primary and secondary schools and colleges.

The focus of courses in School Teacher Training is the theories, methods and practice of teaching, the growth, development and behaviour of young people, and the information resources needed for effective learning.

Courses of study in School Teacher Training aim to develop:

- · an understanding of the philosophical and theoretical bases of education and its role in society
- an understanding of the theory, methods and practice of teaching young people
- an understanding of the factors which influence learning, teaching strategies and educational processes
- · an understanding of the role of the school library and in the teaching of information skills
- the ability to plan, implement and evaluate appropriate curricula and learning programs for school children

Fields of study in this narrow field are classified into the following detailed fields:

- 311 Early Childhood Teaching
- 312 Primary Teaching
- 313 Secondary Teaching
- 314 Teacher-Librarianship

#### **Exclusions:**

Special Education and Teaching English as a Second Language are excluded from this narrow field as they are applicable both inside and outside formal school settings. They are included in Narrow Field 39 Other Education.

# 311 Early Childhood Teaching

Early Childhood Teaching is the study of the theories, methods and practice of teaching children between the ages of 3 and 8 within formal school settings.

#### Subjects studied include:

Child Development
Comparative Education
Curriculum Studies
Early Childhood Learning
Educational and Child Psychology
Philosophy and Sociology of Education
Speech Development and Language Acquisition
Teaching Methods and Practice
The Management of Children

#### Skills learnt include:

 applying the philosophies and theoretical bases of education to the practice of teaching

- analysing the social factors which influence education and in particular early childhood education
- developing and evaluating curricula and teaching strategies which take into account the growth, development and behaviour of young children
- communicating and interacting effectively with young children in a variety of learning environments to provide meaningful learning experiences
- recognising the requirements of young children, including those with special needs, responding to meet these requirements and providing feedback to parents and other professionals
- monitoring and evaluating the development of young children

#### Examples of qualifications include:

- 1 311 Master of Education (Early Childhood)
- 2 311 Diploma of Education in Pre-school Teaching Diploma of Education (Early Childhood)
- 3 311 Bachelor of Education (Early Childhood)
- 4 311 Diploma of Teaching in Early Childhood
  Education
  Diploma of Teaching in Pre-School Teaching
  Diploma in Infants Teaching
- 5 311 Associate Diploma of Teaching (ECE)

# 312 Primary Teaching

**Primary Teaching** is the study of the theories, methods and practice of teaching children between the ages of 5 and 12 within formal school settings.

#### Subjects studied include:

Child Development
Comparative Education
Curriculum Studies
Educational and Child Psychology
Philosophy and Sociology of Education
Speech Development and Language Acquisition
Teaching Methods and Practice

#### Skills learnt include:

- applying the philosophies and theoretical bases of education to the practice of teaching
- analysing the social factors which influence education and in particular primary school education
- developing and evaluating appropriate curricula and teaching strategies which take into account the growth, development and behaviour of children
- communicating and interacting effectively with children in a variety of learning environments to provide meaningful learning experiences
- recognising the requirements of children, including those with special needs, responding to meet these requirements and providing feedback to parents and other professionals
- assessing and evaluating the academic progress and personal development of primary school students

# Examples of qualifications include:

- 1 312 Master of Education in Primary Education
- 2 312 Diploma of Education (Primary)
  Graduate Diploma in Teaching (Primary)
  Graduate Diploma in Education (Primary)
- 3 312 Bachelor of Education (Primary)
- 4 312 Diploma of Teaching (Primary)
- 5 312 Trained Primary Teacher's Certificate

#### **Exclusions:**

Primary Teacher-Librarianship is excluded from this detailed field as it is sufficiently specialised to form a separate and distinct detailed field. It is included in Detailed Field 314 Teacher-Librarianship.

# 313 Secondary Teaching

Secondary Teaching is the study of the theories, methods and practice of teaching secondary school students between the ages of 12 and 18 within formal school and college settings.

#### Subjects studied include:

Adolescent Development
Comparative Education
Curriculum Studies
Educational and Adolescent Psychology
Philosophy and Sociology of Education
School and Community
Teaching Methods and Practice

#### Skills learnt include:

- applying the philosophies and theoretical bases of education to the practice of teaching
- analysing the social factors which influence education and in particular secondary school education
- developing and evaluating appropriate curricula and teaching strategies which take into account the growth, development and behaviour of adolescents
- communicating and interacting effectively with secondary school students in a variety of learning environments to provide meaningful learning experiences
- recognising the requirements of secondary school students, including those with special needs, responding to meet these requirements and providing feedback to parents and other professionals
- assessing and evaluating the academic progress and personal development of secondary school students

- 1 313 Master of Education in Secondary Education
- 2 313 Graduate Diploma in Teaching (Secondary)
   Diploma of Education (Secondary)
   Graduate Diploma in Education (Secondary)
- 3 313 Bachelor of Education (Secondary)
  Bachelor of Education in Living Skills
  Bachelor of Education in Science
- 4 313 Diploma of Teaching (Secondary)

#### **Exclusions:**

Secondary Teacher-Librarianship is excluded from this detailed field as it is sufficiently specialised to form a separate and distinct detailed field. It is included in Detailed Field 314 Teacher-Librarianship.

# 314 Teacher-Librarianship

**Teacher-Librarianship** is the study of the theories, methods and practice of teaching; and the integration of library and information resources in schools and colleges.

# Subjects studied include:

Cataloguing
Child Development
Collection Development and Organisation
Educational and Child Psychology
Literacy and Literature in Education
Management and Administration of a Library or
Resources Centre
Teaching Methods and Practices
The Role of the Teacher-Librarian

#### Skills learnt include:

- applying the philosophies and theoretical bases of education to the practice of teaching and librarianship
- analysing the social factors which influence education
- acquiring, organising, producing and using a wide range of materials for research-oriented teaching and learning
- integrating the school library into the total school curriculum by participating in co-operative planning and teaching
- communicating effectively with both school students and teachers
- recognising the requirements of students, including those with special needs, responding to meet these requirements and providing feedback to other professionals

- 2 314 Graduate Diploma in Teacher-Librarianship Graduate Diploma in School Librarianship
- 3 314 Bachelor of Education (School Librarianship)
  Bachelor of Education (Teacher Librarianship)

# Post-School Teacher Training

**Post-School Teacher Training** is the study of teaching and learning and its application to the post-secondary education of people aged 16 years and over in formal and informal settings.

The focus of courses in Post-School Teacher Training is the theories, methods and practice of teaching, especially adult learning processes.

Courses of study in Post-School Teacher Training aim to develop:

- · an understanding of the philosophical and theoretical bases of education and its role in society
- an understanding of the theory, methods and practice of teaching people aged 16 years and over in post-school settings
- an understanding of adult learning processes and the other factors which influence learning and teaching strategies in post-school settings
- an understanding of and experience in relevant vocational and technical areas, and the effects of technological change on these areas
- the ability to plan, implement and evaluate appropriate curricula and learning programs for people aged 16 years and over in post-school settings

Fields of study in this narrow field are classified into the following detailed fields:

- 321 Technical Teaching
- 322 Nursing Education
- 329 Post-School Teacher Training, nec

# 321 Technical Teaching

**Technical Teaching** is the study of the education and training of post-secondary students in trade or other technical fields.

#### Subjects studied include:

Adult and Vocational Education Curriculum Studies Educational Psychology Issues in Adult Education Language and Communication Sociology of Education Teaching Methods and Practice Technology Studies

### Skills learnt include:

- applying the philosophies and theoretical bases of education to the practice of technical teaching
- developing relevant vocational and further educational curricula

- designing, implementing and evaluating learning programmes for both adult and adolescent learners in safe and appropriate settings
- evaluating student learning and advising students on their learning progress, personal and career matters, and appropriate referral resources
- communicating effectively with both students and fellow teachers

- 2 321 Graduate Diploma in Technical Teaching Graduate Diploma in Education (Technical)
- 3 321 Bachelor of Education (Technical)
- 4 321 Diploma of Teaching (Technical) Diploma of Teaching (TAFE)

#### **Exclusions:**

The study of the technical teaching for school students up to the age of 18 in secondary schools and colleges is excluded from this detailed field as it is concerned with teaching in school settings. It is included in Detailed Field 313 Secondary Teaching.

# 322 Nursing Education

**Nursing Education** is the study of the education and training of nurses in tertiary educational institutions and hospital-based settings.

Subjects studied include:

Adult Learning
Communication
Educational Psychology
Educational Technology
Issues in Nursing and Health Care
Sociology of Education
Teaching Methods and Practice

#### Skills learnt include:

- applying the philosophies and theoretical bases of education to the practice of teaching nurses
- developing appropriate nursing science curricula in relation to the overall aims of the profession and the training institution
- designing, implementing and evaluating learning programmes for nursing students in safe and appropriate settings

- evaluating student learning and advising students on their learning progress, personal and career matters, and appropriate referral resources
- communicating effectively with students, other nursing and medical professionals, and members of the hospital administration

#### Examples of qualifications include:

- 2 322 Graduate Diploma in Nursing Education
- 3 322 Bachelor of Education (Nursing)
- 4 322 Diploma of Teaching (Nursing)

# 329 Post-School Teacher Training, nec

**Post-School Teacher Training, nec** is the study of all Post-School Teacher Training not elsewhere classified in Narrow Field 32 Post-School Teacher Training.

- 2 329 Graduate Diploma in Tertiary Education Graduate Diploma in Further Education Graduate Diploma in Adult Education Diploma of Education (Adult Education)
- 3 329 Bachelor of Arts in Adult Education Bachelor of Education in Tertiary Teaching
- 4 329 Diploma of Teaching in Adult Education
- 5 329 Associate Diploma in Training and Development Associate Diploma in Adult Education

# Other Education

**Other Education** is the study of all Education not included elsewhere in Broad Field 3 Education. It includes all specialised teacher training which relates to both school, post-school and informal settings, and education other than teacher training.

Fields of study in this narrow field are classified into the following detailed fields:

- 391 Teaching English as a Second Language
- 392 Special Education
- 399 Other Education, nec

# 391 Teaching English as a Second Language

Teaching English as a Second Language is the study of the theories, methods and practice of teaching English to those whose first language is other than English. Qualifications in this field of study may be concerned with teaching children in school settings or with teaching adults and children in other settings.

#### Subjects studied include:

Adult Learning
Curriculum and Resource Development
Discourse Analysis
Grammar and Communication
Linguistics and Language
Literacy Development
Second Language Teaching Methods
Theory and Practice of TESL
The Use of Materials and Aids

#### Skills learnt include:

- teaching oracy and literacy in English to people whose first language is other than English
- planning, developing, implementing and evaluating TESL programmes
- · managing cross-cultural classes
- skilfully and sensitively monitoring the language development of students
- communicating effectively with students and others involved in the ESL learning process

Examples of qualifications include:

- 1 391 Master of Arts in TESOL
- 2 391 Diploma of Education in Teaching English as a Second Language
   Graduate Diploma of Education in Teaching English as a Second Language
   Graduate Diploma in TESOL
- 4 391 Diploma of Teaching in Teaching English as a Second Language

# 392 Special Education

**Special Education** is the study of the theories, methods and practice of teaching children with special learning needs. This includes children with physical and mental disabilities or impairments, and gifted children. Special Education may be conducted in special schools or by providing support for teachers in primary and secondary schools.

#### Subjects studied include:

Behaviour Modification
Child Development
Child Psychology
Current Issues in Special Education
Curriculum Studies
Intelligence and Assessment
Learning Disability Studies
Sociology of the Family
Sociology of Disability

#### Skills learnt include:

- applying the philosophies and theoretical bases of special education to children with special learning needs
- establishing the skill and functional age levels of targeted groups and individuals to determine appropriate teaching methods
- establishing the personal, social, vocational and educational needs of children with special learning needs
- facilitating the personal and interpersonal development of children with special learning needs
- communicating effectively with children with special learning needs
- communicating effectively with parents and carers of children with special needs, and other professionals

#### Examples of qualifications include:

2 392 Graduate Diploma in Special Education Graduate Diploma in Education (Gifted Children)

> Diploma of Education in Special Education Graduate Diploma in Education (Visual Impairment)

Graduate Diploma in Education (Hearing Impairment)

Graduate Diploma in Education Studies (Language Disorders)

3 392 Bachelor of Special Education Bachelor of Education (Hearing Impairment)

4 392 Diploma of Teaching in Special Education

#### **Exclusions:**

Teaching English as a Second Language is excluded from this detailed field as it is sufficiently specialised and distinct to form a separate detailed field. It is included in Detailed Field 391 Teaching English as a Second Language.

# 399 Other Education, nec

Other Education, nec is the study of all Other Education not elsewhere classified in Broad Field 3 Education.

# Examples of qualifications include:

2 399 Graduate Diploma in Curriculum
Graduate Diploma in Reading Education
Graduate Diploma in Education (School and
Community Development)
Graduate Diploma in Careers Education
Graduate Diploma in Outdoor Education
Graduate Diploma in Educational Technology
Graduate Diploma in Education (Multicultural
Studies)

3 399 Bachelor of Arts in Outdoor Education

# Broad Field 4 Society and Culture

Society and Culture is the study of the physical, social and cultural organisation of human society.

The theoretical content of Broad Field 4 Society and Culture includes:

- human development and behaviour
- · social organisation and structure
- politics of power
- communication
- cultural expression
- belief and value systems
- social research methodology
- human populations and their environments

The main purpose of this broad field of study is to develop an understanding of human behaviour and interaction, beliefs and values, cultural expression, and social structure and organisation.

Fields of study in this broad field are classified into the following narrow fields:

- 41 Behavioural Studies
- 42 Welfare
- 43 Librarianship
- 44 Language and Area Studies
- 45 Religion and Philosophy
- 46 Economics
- 47 Law
- 48 Visual and Performing Arts
- 49 Other Society and Culture

#### Inclusions:

Geography is included in this broad field as it is concerned with the social impact of the physical environment on human society.

# **Behavioural Studies**

**Behavioural Studies** is the study of the past and present behaviour of humans and their interaction and social organisation.

The focus of courses in Behavioural Studies is social institutions, systems and structures, and human behaviour at the individual, group and society level.

Courses of study aim to develop:

- · an understanding of human development, behaviour and interaction
- · an understanding of social and cultural processes and systems, and collective behaviour
- an understanding of political systems and processes
- · an understanding of the social and political aspects of power
- an understanding of the techniques and procedures of research design and analysis
- · an understanding of history and its relation to the current condition of society

Fields of study in this narrow field are classified into the following detailed fields:

- 411 Psychology
- 412 Sociology and Anthropology
- 413 Politics
- 414 History

### 411 Psychology

**Psychology** is the study of the causes and modification of behaviour as a result of individual differences, experience and environment.

#### Subjects studied include:

Abnormal Psychology

**Behaviour Modification** 

Cognitive Processes

Counselling

Group Dynamics

Individual Development

Research Methodology

Psychological Assessment and Measurement

Psychotherapy

Social Psychology

**Statistics** 

#### Skills learnt include:

- constructing, administering and interpreting tests to understand human behaviour
- conducting research into human behaviour at the individual and group level using a variety of social research methods

- planning and implementing individual and group programmes to modify human behaviour
- · conducting counselling sessions

#### Examples of qualifications include:

- 1 411 Master of Clinical Psychology
   Master of Arts in Counselling Psychology
- 2 411 Graduate Diploma in Behavioural Studies
   Graduate Diploma in Psychology
   Graduate Diploma in Applied Child Psychology
   Graduate Diploma in Educational Psychology
- 3 411 Bachelor of Arts in Psychology
  Bachelor of Science in Psychology
  Bachelor of Behavioural Science in Psychology
- 4 411 Diploma in Applied Psychology
- 7 411 Certificate in Childhood Studies

# 412 Sociology and Anthropology

Sociology and Anthropology is the study of collective and individual behaviour, societies and cultures, and social interaction and change.

#### Subjects studied include:

Belief and Value Systems

**Evolution of Humankind and Culture** 

Family and Kinship

Gender and Society

History of Anthropological Thought

Linguistics and Semiotics

Material Culture Studies

**Political Sociology** 

Prehistory

Research Methods

Social Anthropology

Social Stratification

Sociological Theory

Statistics

#### Skills learnt include:

- researching aspects of societies using a variety of social research methods
- evaluating and interpreting cultural, demographic and sociological data
- authenticating, evaluating and interpreting anthropological data

#### Examples of qualifications include:

1 412 Master of Arts in Sociology

Master of Science in Anthropology

2 412 Graduate Diploma in Sociology

3 412 Bachelor of Arts in Sociology
Bachelor of Arts in Anthropology

Bachelor of Science in Anthropology

#### 413 Politics

**Politics** is the study of political theories, processes, events and institutions, the operation and function of government, and the influence of political organisations on public policy.

#### Subjects studied include:

History of Political Thought

**International Relations** 

**Political Analysis** 

**Political Economics** 

**Public Administration** 

Public Policy and State

Society and Political Systems

The Structure of Government

#### Skills learnt include:

- evaluating and interpreting the links between political structures and social and economic development
- evaluating the effect of economic and political change, and government policy on international relations
- analysing the various factors affecting voting behaviour and the nature of political campaigning

#### Examples of qualifications include:

- 1 413 Master of Arts in Political Science
- 2 413 Graduate Diploma of Arts in Politics
- 3 413 Bachelor of Arts in Political Science Bachelor of Arts in Government Bachelor of Arts in Politics

# 414 History

History is the study of past cultures, events and ideas.

#### Subjects studied include:

Colonialism

Confucian Thought

Egyptology

**European Revolutions** 

**Fascism** 

Mediaeval Europe

Nationalism

**Prehistory** 

#### Skills learnt include:

- · evaluating evidence used in historical research
- compiling historical data from primary and secondary sources, and interviews
- analysing the impact of historical events on past and contemporary society
- identifying, authenticating, analysing and evaluating material artifacts

#### Examples of qualifications include:

- 1 414 Master of Science in Archaeology
- 2 414 Graduate Diploma in Archaeology Graduate Diploma of Arts in Local History
- 3 414 Bachelor of Arts in Archeology

Bachelor of Science in Archeology

Bachelor of Arts in History

5 414 Associate Diploma in Local and Applied History

#### Welfare

**Welfare** is the study of social intervention designed to help persons, individually and collectively, maximise their social and economic well-being. It includes the study of child care.

The focus of courses in Welfare is social theory, policy and practice, individuals, families and specific groups in need of social and/or emotional care, and the development and social needs of children from birth to approximately 8 years.

Courses of study in Welfare aim to develop:

- an understanding of the social, political and economic climate in which social policy is developed, administered and implemented
- an understanding and awareness of the social needs of individuals, groups and communities within society, and the resources available to meet these needs
- an understanding of the social influences that effect the behaviour and social functioning of people
- an understanding of early childhood development and behaviour, and the provision of child care
- the ability to plan and deliver welfare programmes, and organise resources to meet individual and community needs

Fields of study in this narrow field are classified into the following detailed fields:

- 421 Social Work
- 422 Child Care
- 429 Welfare, nec

# 421 Social Work

**Social Work** is the study of the welfare needs of communities, specific groups and individuals, and the appropriate ways of meeting these needs.

Subjects studied include:

Case Load Management

**Human Services Management** 

Legislation

Policy and Practice Issues

Psychology

Social Research

Social Work

Sociology

#### Skills learnt include:

- assessing the welfare requirements of individuals and groups
- assisting individuals, groups and communities in relation to family and child welfare, probation and parole, housing, health and rehabilitation

- assisting individuals, groups and communities to utilise their own resources to improve their well-being
- mediating between, and counselling individuals, groups, and communities

Examples of qualifications include:

- 1 421 Master of Social Work
- 2 421 Graduate Diploma in Social Work
- 3 421 Bachelor of Social Work
  - Bachelor of Arts in Social Work
- 4 421 Diploma of Technology in Social Work5 421 Associate Diploma in Social Work

# 422 Child Care

Child Care is the study of the development and care of children from birth to approximately 8 years of age.

Subjects studied include:

Childhood Development

Family and Society

Infant Care and Development

Nursery and Health Care Nutrition Observation Techniques Programme Planning

#### Skills learnt include:

- planning, organising and implementing programmes for the care of young children
- communicating with young children, parents and other professionals
- identifying and providing for the educational and developmental needs of young children

#### Examples of qualifications include:

- 2 422 Graduate Diploma in Early Childhood Services
- 4 422 Diploma in Childcare
  Diploma of Social Science in Childcare Services
- 5 422 Associate Diploma of Social Science in Child Care
  - Advanced Certificate in Child Care
- 6 422 Certificate in Child Care Assisting Certificate in Child Care Studies

### **Exclusions:**

Early childhood education is excluded from this detailed field as it is more concerned with the formal education of young children than caring for them. It is included in Detailed Field 311 Early Childhood Teaching.

#### 429 Welfare, nec

Welfare, nec is the study of all Welfare not elsewhere classified in Narrow Field 42 Welfare.

- 1 429 Master of Arts in Clinical Drug Dependence Studies
  - Master of Arts in Counselling
- 2 429 Graduate Diploma in Counselling Graduate Diploma in Gerontology Graduate Diploma in Student Guidance and Welfare
- 3 429 Bachelor of Education in Counselling Bachelor of Social Science in Youth Work
- 4 429 Diploma of Developmental Disabilities
- 5 429 Associate Diploma in Rehabilitation Counselling Associate Diploma in Social Science in Youth Work
- 6 429 Certificate in Developmental Disabilities
- 7 429 Certificate in Working With Disabled People Certificate in Residential Care Certificate in Training the Handicapped

# Librarianship

**Librarianship** is the study of the methods of selecting, acquiring, organising and storing collections of information, and facilitating the use of information.

The focus of the course in Librarianship is information retrieval and dissemination, and the organisation and management of library functions, services and collections.

Courses of study in Librarianship aim to develop:

- an understanding of different methods and practices in library and information management
- an understanding of the methods of selecting and organising library resources
- · an understanding of the technology used in the storage, retrieval and dissemination of information
- the ability to assess the information requirements of users, and to utilise various information sources to meet these needs

Fields of study in this narrow field are classified into the following detailed fields:

431 Librarianship

# 431 Librarianship

**Librarianship** is the study of the methods of selecting, acquiring, organising, and storing collections of information, and facilitating the use of information.

Subjects studied include:

Cataloguing and Classifications
Collection Management
Information Retrieval and Dissemination
Information Resources
Library Administration
Reader Guidance
Retrieval Systems

#### Skills learnt include:

- identifying and meeting the information needs of individuals, groups and organisations
- using various technologies and media for recording, storing and retrieving information
- meeting the day to day user requirements and requests including the loan and return of books
- managing and maintaining information collections

#### Examples of qualifications include:

- 1 431 Master of Library Science Master of Archive Administration
- 2 431 Graduate Diploma in Librarianship
  Graduate Diploma in Library and Information
  Management

Graduate Diploma in Library Science Graduate Diploma in Information Studies

- 3 431 Bachelor of Arts in Librarianship
  Bachelor of Business in Library and
  Information Management
  Bachelor of Arts in Library and Information
  Science
- 4 431 Diploma in Librarianship
- 5 431 Associate Diploma in Library Technician Studies Associate Diploma of Arts in Library Studies Associate Diploma in Library Practice
- 7 431 Traineeship Certificate in Library Technical Assisting

# Language and Area Studies

Language and Area Studies is the study of the structure and use of languages, and the literature and culture of particular times and geographic areas.

The focus of courses in Language and Area Studies is phonology, morphology, semantics, syntax, lexical systems, literature and translation, and cultural studies.

Courses of study in Language and Area Studies aim to develop:

- an understanding of the nature, structure, sound and form of languages
- an understanding of languages, literature and history in their social and cultural contexts
- an understanding of the development and changes in literary styles
- the ability to understand, speak, read and write a foreign language
- · the ability to critically analyse literary works and form

Fields of study in this narrow field are classified into the following detailed fields:

- 441 Literature
- 442 Languages
- 449 Language and Area Studies, nec

#### 441 Literature

**Literature** is the study of written works, including poetry, fiction, drama, satire, nonfictional prose and biographical literature. It excludes the study of writings that are primarily technical, scientific or journalistic.

#### Subjects studied include:

American Literature

Australian Literature

Comedy

Creative Writing

**English Literature** 

**Feminist Fictions** 

Form of the Novel

Irish Literature

Literature since 1920

Literary Criticism

Modern Lyric and Dramatic Poetry

#### Skills learnt include:

- analysing the development of and changes in literary styles
- analysing approaches to, and techniques of writing
- critically analysing and evaluating form, themes, style and content
- presenting critiques in written and oral form

# Examples of qualifications include:

1 441 Master of Arts in Literature

2 441 Graduate Diploma in English
Graduate Diploma of Arts in Children's
Literature

3 441 Bachelor of Arts in English Bachelor of Arts in Literature

4 441 Diploma of Arts in English

# 442 Languages

Languages is the study of the structure and composition of languages, and developing proficiency in reading, writing and speaking foreign languages. It includes the study of the related cultures, literature and linguistics.

# Subjects studied include:

Acoustics and Phonetics

Linguistics

Generative Grammar

Phonology

Syntax and Semantics

Modern Language

#### Skills learnt include:

- analysing foreign languages and literature in their social and cultural context
- speaking, understanding, reading and writing foreign languages
- translating and interpreting languages

#### Examples of qualifications include:

- 1 442 Master of Arts in Applied Linguistics Master of Arts in German Language
- 2 442 Graduate Diploma of Arts in Modern Languages Graduate Diploma of Arts in Interpreting and Translating
- 3 442 Bachelor of Arts in Asian Languages
  Bachelor of Arts in Interpreting and Translating
  Bachelor of Arts in Community Languages
- 4 442 Diploma of Arts in Languages
- 7 442 Certificate in Interpreting
  Certificate in Languages
  Certificate in Applied Language Studies

# 449 Language and Area Studies, nec

Language and Area Studies, nec is the study of all Language and Area Studies not elsewhere classified in Narrow Field 44 Language and Area Studies.

- 1 449 Master of Arts in Classics
  Master of Arts in Renaissance Studies
- 2 449 Graduate Diploma in Asian Studies Graduate Diploma of Arts in Australian Cultural Studies
- 3 449 Bachelor of Arts in Asian Studies
  Bachelor of Arts in American Studies
  Bachelor of Arts in Medieval Studies
  Bachelor of Arts in Ancient Civilisations

# Religion and Philosophy

**Religion and Philosophy** is the study of the nature and context of human experience, perception, and interpretation of reality, and human spirituality and beliefs.

The focus of courses in Religion and Philosophy is metaphysics and epistemology, ethics and morals, logic, belief systems, religious practices and artifacts, and sacred writings.

Courses of study in Religion and Philosophy aim to develop:

- an understanding of theology, metaphysics, ethics, and spirituality in relation to religious understanding and practice
- an understanding of the perception of truth, being and reality
- an understanding of the responsibilities and practices associated with ministering from within a church
- the ability to assess and express philosophical and religious arguments in a clear, concise and logical manner

Fields of study in this narrow field are classified into the following detailed fields:

- 451 Religious Studies
- 452 Philosophy

# 451 Religious Studies

**Religious Studies** is the study of religious beliefs, concepts, symbols, expressions, texts and spirituality.

Subjects studied include:

**Biblical Languages** 

**Biblical Studies** 

Christian Ethics and Laws

**Church History** 

Comparative Religion

**Eastern Religions** 

Liturgy

Ministry and Practice

Philosophy

Psychology

Spirituality

Theology

#### Skills learnt include:

- authenticating, studying and interpreting religious writings and texts
- ministering and counselling individuals and groups
- preparing and conducting services of public worship
- conducting baptisms, marriages, funeral and special services

Examples of qualifications include:

1 451 Doctor of Divinity

Master of Theology

2 451 Graduate Diploma in Theology
 Graduate Diploma of Arts in Religious Studies
 Graduate Diploma in Ministerial Leadership

3 451 Bachelor of Theology

Bachelor of Arts in Religious Studies

**Bachelor of Divinity** 

, 4 451 Diploma of Theology Diploma of Arts in Theology

Diploma in Ministry

7 451 Certificate in Theology

Certificate in Biblical Studies

Certificate in Religious Studies

### 452 Philosophy

**Philosophy** is the study of human beliefs and the nature of truth, being and reality, and the scope and limits of our knowledge. It includes the study of formal logic.

Subjects studied include:

Aesthetics

Contemporary French Philosophy

Cosmology and Relativism

Dialectic

Empiricism and Rationalism Ethics Greek Philosophy Reasoning and Logic

#### Skills learnt include:

- · applying theories of logic to rational argument
- · evaluating belief systems, ethics and morals
- analysing, constructing and deconstructing arguments using the methods of critical reasoning

- 1 452 Master of Arts in Logic Master of Arts in Philosophy
- 2 452 Graduate Diploma of Arts in Philosophy
- 3 452 Bachelor of Arts in Philosophy Bachelor of Science in Philosophy

# **Economics**

Economics is the study of the allocation, distribution, exchange and efficient use of limited resources.

The focus of courses in Economics is economic policy formation, economic theory, trade and commerce, and economic decision making.

Courses of study in Economics aim to develop:

- an understanding of economic theory and its relationship to the production, distribution and consumption of wealth
- · an understanding of macroeconomic and microeconomic theories
- An understanding of the structure of the local economy and its relationship to overseas economies
- an understanding of the effects of economic decisions on individual, business and government behaviour
- · an understanding of quantitative and analytical techniques

Fields of study in this narrow field of study are classified into the following detailed fields:

461 Economics

#### 461 Economics

**Economics** is the study of the allocation, distribution, exchange and efficient use of limited resources.

Subjects studied include:

Accounting

**Applied Economics** 

**Business and Public Finance** 

Commercial Law

**Econometrics** 

**Economic Development** 

**Economic History** 

**Industrial Relations** 

Macroeconomics

Microeconomics

Statistics

#### Skills learnt include:

- analysing economic policy to determine the effect on individuals, businesses and the economy as a whole
- researching and preparing reports and studies on economic conditions, activities and policy decisions
- developing models of economic behaviour using quantitative techniques

Examples of qualifications include:

1 461 Master of Economics

Master of Business in Economics

2 461 Graduate Diploma in Agricultural Economics
 Graduate Diploma in Econometrics
 Graduate Diploma in Economics

3 461 Bachelor of Agricultural Economics

**Bachelor of Economics** 

Bachelor of Arts in Economics

#### Law

Law is the study of the principles and procedures for formally maintaining social order.

The focus of courses in Law is the constitution, acts of parliament, statutes, court decisions, contracts, torts and trusts.

Courses of study aim to develop:

- an understanding of the historical development of law and legal practice and its role as a framework for the development and maintenance of social order
- an understanding of the principles and practice of commercial law in relation to agreement and transactions in trade or business
- an understanding of the principles and practice of criminal law in relation to the investigation and prosecution of criminal offences
- an understanding of the constitution and constitutional law, and its relationship to the Australian federal system, and the respective powers of the federal and state governments
- the ability to assess and evaluate the reliability of evidence, analyse legal issues and express legal arguments in speech and writing

Fields of study in this narrow field of study are classified into the following detailed fields:

471 Law

#### 471 Law

Law is the study of the principles and procedures for formally maintaining social order.

#### Subjects studied include:

Commercial and Company Law

Comparative and Constitutional Law

Contract Law

Criminal Law

Equity

Evidence

Family Law

**Human Rights** 

Jurisprudence

Legal Writing and Research

Legislation

**Torts** 

#### Skills learnt include:

 advising individuals, groups, organisations and governments on legal and constitutional matters

- preparing legal cases by investigating circumstances and researching relevant statutes and precedents
- presenting prosecution and defence cases in courts of law
- drawing up documents relating to court matters and contracts, and representing clients in general legal matters

#### Examples of qualifications include:

- 1 471 Master of International Law
  - Master of Law
- 2 471 Graduate Diploma of Jurisprudence

Graduate Diploma of Legal Practice

Graduate Diploma of Law

3 471 Bachelor of Laws

Bachelor of Arts in Legal Studies

Bachelor of Commerce in Legal Studies

5 471 Associate Diploma of Business in Legal Studies

7 471 Certificate of Business Studies in Law

# Visual and Performing Arts

**Visual and Performing Arts** is the study of creating and performing works of art, music, dance and drama. It includes the study of clothing design and creation.

The focus of courses in the Visual and Performing Arts is composition, performance, artistic production, choreography, design and creativity.

Courses of study in the Visual and Performing Arts:

- an understanding of the history, development and theory of the visual and performing arts
- an understanding of the artistic and technical aspects of the creation, production and performance of music, dance and drama
- an understanding of the artistic and technical aspects of the creation and production of art and craft,
   photographs and fashion apparel
- an understanding of the artistic and technical aspects of visual communication
- · the ability to design, create, exhibit or perform an original piece of work either individually or with others

The fields of study in this narrow field are classified into the following detailed fields:

- 481 Music
- 482 Art and Craft
- 483 Photography
- 484 Graphic Design
- 485 Fashion Design
- 486 Drama and Dance
- 489 Visual and Performing Arts, nec

# 481 Music

**Music** is the study of the history, theory and performance of music.

#### Subjects studied include:

Composition

Conducting

History of Arts

Improvisation

Jazz Studies

Musical Theatre

Musicianship

Performance

Repertoire Studies

#### Skills learnt include:

- composing music for voice and instrument
- arranging, transcribing and conducting musical compositions and scores
- playing musical instruments as a soloist or member of an ensemble, band or orchestra

- singing classical, popular or church music as a soloist or member of a choir
- · critically analysing music form and harmony

#### Examples of qualifications include:

1 481 Master of Music

Master of Arts in Music

2 481 Graduate Diploma in Musical Composition

Graduate Diploma in Repetiteur

Graduate Diploma of Accompaniment

Graduate Diploma in Music

3 481 Bachelor of Arts in Musicology

Bachelor of Arts in Ethnomusicology

Bachelor of Arts in Music Performance

Bachelor of Music

4 481 Diploma in Music

Diploma of Music in Composition

5 481 Associate Diploma in Music

Associate Diploma in Jazz Studies

7 481 Certificate of Music in Performance

#### 482 Art and Craft

**Art and Craft** is the study of visual non-literary forms of creative expression for artistic and aesthetic.

#### Subjects studied include:

Art History and Theory

Ceramics

Craft Appreciation

Design

Etching

Painting

**Printmaking** 

Sculpture

Sketching

**Tapestry** 

Woodcraft

#### Skills learnt include:

- using techniques to harmonise line, colour, design and form
- · developing ideas for artistic presentation
- selecting artistic media, methods and materials
- drawing, painting, sculpting and using other techniques to produce artistic objects

#### Examples of qualifications include:

- 1 482 Master of Arts in Fine Art Master of Arts in Art History
- 2 482 Graduate Diploma of Arts in Studio Ceramics Graduate Diploma of Fine Art in Painting
- 3 482 Bachelor of Arts in Fine Art
  Bachelor of Arts in Ceramics
  Bachelor of Arts in Painting and Printmaking
- 4 482 Diploma of Arts in Fine Arts
- 5 482 Associate Diploma of Art in Ceramics Associate Diploma of Creative Arts in Fibre Associate Diploma in Fine Arts
- 6 482 Certificate in Fine Arts
- 7 482 Certificate in Sculpture Certificate in Textiles Craft

### 483 Photography

**Photography** is the study of composing, taking, developing, printing, enlarging and presenting photographs for creative and practical purposes.

#### Subjects studied include:

Black and White Photography

Colour Photography

Composition

**Darkroom Techniques** 

Photographic Equipment and Materials

Principles of Light and Film

#### Skills learnt include:

- using techniques which harmonise light, colour and subjects
- adjusting camera angles, settings and subjects to achieve the desired effect
- using appropriate cameras, films, filters, lighting and exposures to produce high quality photographs
- developing, reproducing and retouching photographs

#### Examples of qualifications include:

- 1 483 Master of Fine Arts in Photography
- 2 483 Graduate Diploma of Art in Photography
- 3 483 Bachelor of Arts in Photography
  Bachelor of Applied Science in Photography
- 4 483 Diploma of Applied Science in Photography
- 5 483 Associate Diploma of Arts in Applied Photography
- 7 483 Certificate in Photography

# 484 Graphic Design

**Graphic Design** is the study of the techniques and skills necessary to design and produce finished artwork, and solve design and visual communication problems.

# Subjects studied include:

**Advertising Concepts** 

Design and Colour

Drawing and Rendering

Film and Video

Illustration

Image Making

Lettering

**Packaging** 

Photography

Publishing Design

Reproduction and Printing

**Typography** 

#### Skills learnt include:

- preparing illustrations and sketches to communicate design concepts to others
- determining the objectives of design in consultation with management, sales and manufacturing staff and clients
- using words and pictures to make a clear graphic statement

- 1 484 Master of Design in Visual Communication
- 2 484 Graduate Diploma of Arts in Graphic Design
- 3 484 Bachelor of Arts in Visual Communication Bachelor of Arts in Graphic Design Bachelor of Design in Graphic Design
- 4 484 Diploma of Art in Graphic Design

- 5 484 Associate Diploma of Arts in Graphic Design Advanced Certificate in Commercial Art
- 6 484 Certificate in Graphic Design
- 7 484 Certificate in Ticketwriting

# 485 Fashion Design

**Fashion Design** is the study of creatively combining line, form and fabric in designing, and constructing fashion garments.

#### Subjects studied include:

Business Communication and Law Costume and Life Drawing Fashion and Lifestyle Studies Garment Making Historic and Ethnic Costumes Pattern Design Textile Design and Technology

#### Skills learnt include:

- formulating design concepts for garments
- preparing illustrations and sketches to communicate design concepts
- supervising the production of sample garments

#### Examples of qualifications include:

- 3 485 Bachelor of Arts in Fashion
- 4 485 Diploma of Arts in Fashion Design
- 5 485 Associate Diploma of Arts in Fashion Associate Diploma of Fashion
- 7 485 Certificate in Fashion
  Certificate in Fashion and Design

#### 486 Drama and Dance

**Drama and Dance** is the study of the principles and techniques associated with performance involving speech, movement, mime, characterisation, improvisation and stage craft.

# Subjects studied include:

Acting

Choreography

Dance

Design for Theatre

History of Theatre

Improvisation

Lighting and Sound Design

Movement

Production and Direction

Play Reading

Radio Drama

Stage Craft

Voice

#### Skills learnt include:

- interpreting musical scores, stories and themes
- choreographing dance to harmonise with music and subject, illustrate a story, convey emotion or complement a musical show
- performing dances such as classical, modern and contemporary dances
- studying plays and drama productions to gain understanding of a part or characterisation
- creating and interpreting roles for dramatic productions to communicate their subject and meaning
- producing and directing musical, comedy and drama performances

#### Examples of qualifications include:

- 1 486 Master of Arts in Drama
- 2 486 Graduate Diploma in Movement and Dance
- 3 486 Bachelor of Arts in Dance Bachelor of Arts in Drama Bachelor of Arts in Performing Arts
- 4 486 Diploma in Dramatic Art
  Diploma of Performing Arts in Dance
- 5 486 Associate Diploma of Arts in Acting Associate Diploma of Arts in Dance Performance

# 489 Visual and Performing Arts, nec

Visual and Performing Arts, nec is the study of all Visual and Performing Arts not elsewhere classified in Narrow Field 48 Visual and Performing Arts.

- 2 489 Graduate Diploma in Jewellery Graduate Diploma in Silversmithing
- 3 489 Bachelor of Visual Arts in Animation Bachelor of Fine Arts in Textiles
- 4 489 Diploma in Jewellery Diploma in Goldsmithing
- 5 489 Associate Diploma in Jewellery Design Associate Diploma in Textiles Advanced Certificate in Technical Theatre Associate Diploma in Silversmithing
- 6 489 Trade Certificate in Jewellery Jewellery Apprenticeship Floristry Apprenticeship
- 7 489 Certificate in Jewellery
  Certificate in Lapidary and Jewellery
  Certificate in Jewellery Fabrication
  Certificate in Commercial Floristry

# Other Society and Culture

Other Society and Culture is the study of all Society and Culture not included elsewhere in Broad Field 4 Society and Culture.

Fields of study in this narrow field are classified into the following detailed fields:

- 491 Geography
- 492 Communication
- 493 Recreation and Leisure
- 494 Policing Studies
- 499 Other Society and Culture, nec

# 491 Geography

**Geography** is the study of spatial variations in human and physical phenomena on the earth's surface. It includes the study of interactions between humans and the physical environment.

#### Subjects studied include:

Biogeography

Climatology

Geographic Information Systems

Geomorphology

Human Geography

Physical Geography

Population and Resources

Research Methods

Social and Urban Geography

**Surficial Processes** 

#### Skills learnt include:

- analysing the form, content and function of each areal part and region of the earth and their patterns and interconnections
- analysing the relationships between society, economic processes and the environment
- analysing ecosystems to establish the relationships between climate, landform, soils and plants
- compiling and analysing data on physical and environmental factors
- analysing causes of and variation in population densities

# Examples of qualifications include:

- 1 491 Master of Arts in Geography
  Master of Science in Geography
- 2 491 Graduate Diploma of Arts in Geography Graduate Diploma of Science in Geography

- 3 491 Bachelor of Arts in Geography
  Bachelor of Science in Biogeography
- 4 491 Diploma of Arts in Geography

#### 492 Communication

**Communication** is the study of the creation, production, dissemination and evaluation of messages.

# Subjects studied include:

Campaign Planning

Communication Research

**Editing** 

Feature Writing

Mass Communication

Media Analysis

Media Policy

Media Production (Television, Sound and Visual)

**News Reporting** 

Persuasion and Propaganda

Print and Broadcast Journalism

**Public Relations** 

**Publicity Practice** 

#### Skills learnt include:

- producing and transmitting messages and evaluating their effectiveness
- collecting and analysing facts about events and individuals from interviews, printed matter, investigations and observations
- writing news reports, commentaries and feature stories on topics of public interest
- researching public opinion, analysing findings and planning publicity campaigns
- issuing press releases and organising exhibitions, seminars and social functions to inform, promote good-will and give favourable publicity

- planning, directing and co-ordinating the filming of motion picture and television programmes, and the recording and broadcasting of radio productions
- editing films and video tapes, and adding sound tracks

#### Examples of qualifications include:

- 1 492 Master of Arts in Journalism
- 2 492 Graduate Diploma in Media
   Graduate Diploma in Editing and Publishing
   Graduate Diploma in Public Relations
- 3 492 Bachelor of Arts in Media Studies Bachelor of Arts in Journalism Bachelor of Science in Media
- 5 492 Advanced Certificate in Public Relations
  Associate Diploma of Applied Science in
  Broadcasting and Journalism
  Advanced Certificate in Radio Broadcasting
- 7 492 Certificate in Audio Production
  Certificate in Public Relations
  Certificate in Broadcasting
  Certificate in Video Production

#### 493 Recreation and Leisure

**Recreation and Leisure** is the study of recreational and leisure activities, their role in society, and the development of recreational and leisure programmes.

#### Subjects studied include:

Developmental and Educational Psychology
Health and Lifestyle
Interpersonal Communication Skills
Leadership and Recreation Programming
Organisational and Political Behaviour
Programming Methods (e.g. Dance in Recreation,
Music in Recreation)
Social and Psychological Dimensions of Leisure
Society and Social Behaviour

#### Skills learnt include:

- developing recreation and leisure programmes for individuals, groups and communities
- advising people on recreation and leisure programmes suitable to their age, gender, fitness level and lifestyle
- leading people in recreation and leisure programmes in a safe and supportive manner

#### Examples of qualifications include:

- 1 493 Master of Arts in Leisure Studies Mater of Arts in Recreation
- 2 493 Graduate Diploma in Leisure Studies Graduate Diploma of Arts in Recreation

- 3 493 Bachelor of Arts in Leisure Studies Bachelor of Arts in Recreation Bachelor of Leisure Studies
- 5 493 Associate Diploma in Recreation Associate Diploma in Recreation Leadership

# 494 Policing Studies

Policing Studies is the study of law enforcement operations, crime detection and prevention, and police administration. It includes the study of criminal justice systems with respect to police, courts and corrective services.

#### Subjects studied include:

Administration
Correctional Studies
Criminology
Crisis Intervention
Enquiry and Research Techniques
Judicial Systems
Legal Studies
Multicultural Studies
Police Administration
Police Regulations
Police Supervision Techniques
Psychology
Sociology

#### Skills learnt include:

- investigating crimes, minor offences and citizen's complaints
- taking statements and collecting evidence at scenes of crimes or traffic accidents
- preparing briefs or reports for police files or for use in court
- observing and controlling traffic, and issuing traffic infringement notices
- analysing criminal behaviour, law and control in society
- supervising people in corrective institutions and on remand

### Examples of qualifications include:

- 3 494 Bachelor of Social Sciences in Policing Studies Bachelor of Arts in Police Studies Bachelor of Arts in Criminal Justice Administration
- 5 494 Associate Diploma of Social Science in Police Studies

Advanced Certificate in Law Enforcement Studies

Associate Diploma in Police Studies

7 494 Certificate in Police Studies

# 499 Other Society and Culture, nec

Other Society and Culture, nec is the study of all Other Society and Culture not elsewhere classified in Narrow Field 49 Other Society and Culture.

Examples of qualifications include:

- 1 499 Master of Arts in Demography Master of Arts in Criminology Master of Town and Regional Planning Master of Arts in Multicultural Studies
- 2 499 Graduate Diploma of Business in Industrial Relations
   Graduate Diploma in Urban Planning
   Graduate Diploma in Strategic Studies

Graduate Diploma in International Relations Graduate Diploma in Urban and Regional Planning

Graduate Diploma of Humanities in Peace Studies

- 3 499 Bachelor of Applied Science in Home
  Economics
  Bachelor in Town Planning
  Bachelor of Arts in Urban Studies
  Bachelor of Arts in Women's Studies
  Bachelor of Applied Science in Consumer
- 5 499 Associate Diploma in Labour Studies
  Associate Diploma in Home Economics
  Associate Diploma of Community Development
  Advanced Certificate in Industrial Relations
- 7 499 Certificate in Private Enquiry Agency Practice Certificate of Family Management Certificate in Home Economics

# Broad Field 5 Natural and Physical Sciences

**Natural and Physical Sciences** is the systematic study of the nature and properties of the universe, and the study of the measurement of and relations between quantity. It employs the principles of the scientific method.

The theoretical content of Broad Field 5 Natural and Physical Sciences includes:

- biological processes
- · chemical reactions
- subatomic particles and quantum mechanics
- thermodynamics and entropy
- · mathematical and statistical techniques
- · observation and measurement
- · foundations of artificial intelligence
- scientific method
- laboratory methodology

The main purpose of this broad field of study is to develop an understanding of the workings of the universe, and to extend the body of scientific knowledge.

Fields of study in this broad field are classified into the following narrow fields:

- 51 Life Science
- 52 Physical Science
- 53 Mathematics and Statistics
- 54 Computer Science
- 59 Other Natural and Physical Sciences

#### **Exclusions:**

Engineering is excluded from this broad field as it is more concerned with technological applications of scientific principles than scientific study itself. It is sufficiently specialised to form a distinct and separate broad field, Broad Field 6 Engineering.

Health is excluded from this broad field as it is more concerned with the application of scientific principles for the care and treatment of patients than scientific study itself. It is sufficiently specialised to form a distinct and separate broad field, Broad Field 2 Health.

Geography is excluded from this broad field as it is concerned with the social impact of the physical environment on human society. It is included in Detailed Field 491 Geography.

# Life Science

Life Science is the study of all living organisms, including their interaction with the environment.

The focus of qualifications in Life Science is the structure, function, development, life processes and classification of organisms, and ecology.

Courses of study in Life Sciences aim to develop:

- an understanding of the genetics and physiology of living organisms
- an understanding of the relationship of living organisms to one another as well as the physical environment
- an understanding of the life processes, and the functioning of terrestrial and aquatic ecosystems
- an understanding of how physical, economic, social and technological factors effect the environment
- an understanding of the principles and techniques of scientific research and their application in a laboratory or in the field
- the ability to assess and validate biological data to reach conclusions and determine further areas of investigation

Fields of study in this narrow field are classified into the following detailed fields:

- 511 Biological Science
- 512 Environmental Science

# 511 Biological Science

**Biological Science** is the study of the structure, function, reproduction, growth, evolution and behaviour of living organisms.

Subjects studied include:

Animal Structure and Function

**Biochemistry** 

**Biological Systems** 

Biology

Cell Biology

Genetics

Metabolism

Molecular and Cellular Biology

Parasitology

Zoology

#### Skills learnt include:

- examining cells and tissue to determine their structure and function
- preparing specimens for examination using a variety of techniques
- applying appropriate laboratory and field study techniques and procedures to research

- analysing and interpreting biological data resulting from experiments to test theories and hypotheses
- analysing the factors effecting the growth and reproduction of living organisms

#### Examples of qualifications include:

- 1 511 Master of Science in Molecular Biology Master of Science in Genetics Master of Science in Parasitology
- 2 511 Graduate Diploma in Neurosciences
  - Graduate Diploma in Clinical Biochemistry Graduate Diploma in Physiology
- 3 511 Bachelor of Science in Cell Physiology Bachelor of Science in Botany
  - Bachelor of Science in Botany
    Bachelor of Arts in Zoology
- 5 511 Associate Diploma of Applied Science in Microbiology

Associate Diploma of Applied Science in Biology

Associate Diploma in Biological Techniques

#### **Exclusions:**

Forestry is excluded from this narrow field as it is more concerned with the production of timber and timber products for commercial purposes than biology itself. It is included in Detailed Field 892 Forestry.

### 512 Environmental Science

Environmental Science is the study of the relationships between living organisms and the natural, rural, industrial and urban environments. It includes the study of the impact humans have upon other organisms and on the natural environment.

# Subjects studied include:

Climatology
Ecosystems
Energy and Nutrient Cycles
Environmental Values
Hydrology
Microclimatology
Resource Management
Soil Science
Statistics
Toxicology and Pollution

### Skills learnt include:

- assessing the impact of humans on the environment
- preparing environmental impact statements

- recognising, evaluating and analysing environmental issues of current and future significance
- applying the principles and practices of managing natural ecosystems

- 1 512 Master of Applied Science in Environmental Studies
  - Master of Applied Science in Environmental Toxicology
- 2 512 Graduate Diploma of Science in Tropical Ecology
  - Graduate Diploma in Environmental Management
  - Graduate Diploma in Natural Resources
- 3 512 Bachelor of Environmental Science
  Bachelor of Arts in Ecology
  Bachelor of Applied Science in Coastal
  Management
- 5 512 Associate Diploma of Applied Science in Environmental Technology Associate Diploma in Land Management Associate Diploma of Applied Science in Wilderness Reserves and Wildlife
- 7 512 Certificate in Conservation and Land
  Management
  Certificate of National Park Management
  Certificate in Park Ranger Studies

# **Physical Science**

**Physical Science** is the study of matter and energy, and the transformation patterns linking them. It includes the study of the structure of the earth.

The focus of qualifications in Physical Science is on states and forms of matter and energy, and their relationships to chemical, mechanical and structural systems.

Courses of study in Physical Science aim to develop:

- an understanding of the fundamental properties of the universe and the laws which govern their behaviour
- an understanding of the fundamental properties of elements, compounds and materials, and their reactions and transformations
- an understanding of the physical properties of the earth's crust and the characteristics of its soil, landforms, hydrosphere and atmosphere
- an understanding of the principles and techniques of scientific research and their application in a laboratory or in the field
- the ability to assess and validate physical phenomena to reach conclusions and determine further areas of investigation, and to present these in written and oral form

Fields of study in this narrow field are classified into the following detailed fields:

- 521 Physics
- 522 Chemistry
- 523 Earth Science
- 529 Physical Science, nec

# 521 Physics

**Physics** is the study of the laws governing the states and properties of matter and energy.

Subjects studied include:

Acoustics

Astronomy

Electromagnetic Theory

Electronics

Gravitation

Mathematics

Mechanics

Nuclear and Particle Physics

**Optics** 

Quantum Mechanics

Thermodynamics

Wave Theory

### Skills learnt include:

- applying knowledge of physical laws to practical problems
- analysing and interpreting data resulting from experiments to test theories and hypotheses
- applying appropriate laboratory techniques and procedures to research

#### Examples of qualifications include:

- 1 521 Master of Science in Physics
  - Doctor of Philosophy in Astronomy
- 2 521 Graduate Diploma of Science in Applied Physics
- 3 521 Bachelor of Science in Physics

Bachelor of Arts in Astronomy

Bachelor of Science in Theoretical Physics

5 521 Associate Diploma of Applied Science in

Applied Physics

# 522 Chemistry

**Chemistry** is the study of the composition, structure, and the chemical transformations of matter.

### Subjects studied include:

Atomic and Molecular Structure Energy in Chemical Reactions Equilibrium and Rate Progress Inorganic and Organic Chemistry Kinetics and Catalysis Molecular Properties Organic Structure Determination Organic Synthesis Quantum Mechanics Spectroscopy and Structure Stoichiometry

#### Skills learnt include:

- applying knowledge of the fundamental properties of elements, compounds and their reactions to research and practical situations
- developing and conducting experiments in order to identify the compositional and energy changes resulting from chemical reactions
- using modern chemical instrumentation for the structural analysis of chemical
- testing techniques and processes under a variety of conditions to ascertain the reliability of data

#### Examples of qualifications include:

- 1 522 Master of Applied Science in Toxicology Master of Science in Chemistry
- 2 522 Graduate Diploma of Science in Analytical Chemistry

Graduate Diploma in Applied Chemistry

Bachelor of Science in Chemistry

- 3 522 Bachelor of Science in Chemistry
  Bachelor of Applied Science in Organic
  Chemistry
- 4 522 Diploma of Applied Science in Applied Chemistry
- 5 522 Associate Diploma of Applied Chemistry Associate Diploma of Applied Science in Chemical Technology

### 523 Earth Science

**Earth Science** is the study of the nature, composition and structure of the earth including its atmosphere and hydrosphere.

# Subjects studied include:

Continental Drift and Plate Tectonics

Geochemistry

Geology

Geological Field Techniques

Geophysics

Meteorology

Mineralogy

Oceanography

Palaeontology

Petrology

Sedimentology

Soils Geography

#### Skills learnt include:

- analysing the structure, composition and evolution of the earth, including its atmosphere and hydrosphere
- identifying and classifying crystals, rocks, minerals and fossils
- analysing, interpreting and preparing geological maps and cross-sections
- using geological instruments and field techniques for geological

# Examples of qualifications include:

- 1 523 Master of Science in Meteorology Master of Science in Geophysics
- 2 523 Graduate Diploma in Geoscience Graduate Diploma in Physical Oceanography Graduate Diploma of Applied Science in Soil Science
- 3 523 Bachelor of Applied Science in Geology Bachelor of Arts in Earth Science Bachelor of Science in Hydrology
- 5 523 Associate Diploma in Geoscience Associate Diploma of Applied Science in Geology
- 7 523 Certificate of Applied Science in Meteorology Certificate in Gemmology

# 529 Physical Science, nec

**Physical Science, nec** is the study of all Physical Science not elsewhere classified in Narrow Field 52 Physical Science.

# **Mathematics and Statistics**

Mathematics and Statistics is the study of abstract deductive systems, numerical facts, data and their applications.

The focus of Mathematics and Statistics is symbolic language and logic, mathematical and statistical methods, techniques and modelling, and random processes.

Courses of study in Mathematics and Statistics aim to develop:

- an understanding of order and relation in counting, measurement, shapes of objects, logical reasoning and quantitative calculation
- an understanding of the use of deductive reasoning to prove propositions
- an understanding of mathematical theories and their deductive systems
- an understanding of the theory of probability and statistical methods
- the ability to produce reasoned argument based on clearly stated assumptions to obtain complete, consistent and usable results
- the ability to apply mathematical methods and modelling techniques to practical problems

Fields of study in this narrow field are classified into the following detailed fields:

531 Mathematics

532 Statistics

#### 531 Mathematics

Mathematics is the study of deductive systems. It includes algebra, arithmetic, geometry, real and complex analysis and applied mathematics.

# Subjects studied include:

Algebra

Calculus

Classical Analysis

Classical Mechanics

Complex Calculus

**Differential Equations** 

Discrete Mathematics

Mathematical Modelling

**Numerical Analysis** 

Optimisation

Principles of Analysis

**Probability** 

Set Theory

Topology

Trigonometry

#### Skills learnt include:

- analysing and developing mathematical systems and theories
- using systematic methods to prove theorems and to construct, analyse and interpret mathematical models
- applying mathematical methods to problem solving

- 1 531 Doctor of Philosophy in Linear Algebra
  Master of Applied Science in Mathematical
  Modelling
- 2 531 Graduate Diploma Mathematical Science Graduate Diploma of Science in Mathematics Graduate Diploma of Science in Operations Research
- 3 531 Bachelor of Arts in Mathematics
  Bachelor of Science in Applied Mathematics
- 5 531 Associate Diploma of Applied Science in Mathematics

# 532 Statistics

**Statistics** is the study of collecting, describing, arranging and analysing numerical data.

# Subject studied include:

Distribution Theory and Inference

Linear Models

Multivariate Models

**Numerical Analysis** 

**Probability** 

Random Variables

Regression

**Stochastic Processes** 

Time Series Analysis

### Skills learnt include:

- using statistical models and stochastic processes in the analysis of data
- interpreting descriptive and inferential statistics
- using computer-based statistical packages to analyse data
- applying survey sampling and sampling distribution techniques in survey design and research

# Examples of qualifications include:

1 532 Master of Statistics

Doctor of Philosophy in Statistics

2 532 Graduate Diploma of Science in Applied Statistics

Graduate Diploma in Data Analysis

3 532 Bachelor of Science in Statistics
Bachelor of Arts in Data Analysis
Bachelor of Commerce in Actuarial Studies

# Computer Science

**Computer Science** is the study of the design, development and operation of computer systems and computing environments. It includes the study of the design, maintenance and integration of software applications.

The focus of qualifications in Computer Science is computer systems, computer languages, and processing and storage of data.

Courses of study in Computer Science aim to develop:

- · an understanding of the design, structure and operation of computer systems
- an understanding of the foundation of computational theory
- · an understanding of computer programming techniques
- the ability to analyse, design and manage information systems, provide program specifications, and working programs for their implementation

Fields of study in this narrow field are classified into the following detailed fields:

541 Computer Science

# 541 Computer Science

Computer Science is the study of the design, development and operation of computer systems and computing environments. It includes the study of the design, maintenance and integration of software applications.

#### Subjects studied include:

Algorithms

Artificial Intelligence

Computer Architecture

Computers and Society

**Database Systems** 

Graphics

Information Processing

**Numerical Analysis** 

**Operating Systems** 

**Programming Languages** 

Software Engineering

Systems Analysis and Design

Theory of Compilation

# Skills learnt include:

- designing systems and methods for processing information
- writing program specifications for implementing information systems

- researching, analysing and solving general problems which require the application of computer technology
- applying computer technology to information processing

#### Examples of qualifications include:

- 1 541 Master of Applied Science in Computer Science Master of Information Technology
- 2 541 Graduate Diploma in Computing

Graduate Diploma of Applied Science in

Computer Applications

Graduate Diploma of Business Technology in Digital Communications

3 541 Bachelor of Business in Data Processing Bachelor of Applied Science in Computing

Bachelor of Information Technology

Bachelor of Informatics

- 4 541 Diploma of Computing Science
- 5 541 Associate Diploma of Applied Science in Computing

Associate Diploma of Business in Computer Programming

Associate Diploma of Engineering in Digital Electronics and Computing

7 541 Certificate of Computer Studies

Certificate in Microcomputing

Certificate in Programming

# Other Natural and Physical Sciences

Other Natural and Physical Sciences is the study of all Natural and Physical Sciences not included elsewhere in Broad Field 5 Natural and Physical Sciences.

Fields of study in this narrow field are classified into the following detailed fields:

591 Food Science

592 Laboratory Technology

599 Other Natural and Physical Sciences, nec

### 591 Food Science

**Food Science** is the study of the physical and chemical nature of foods, quality control in the processing and handling of food, and the equipment and procedures used in the production and distribution of food.

# Subjects studied include:

**Biology** 

Chemistry

Food Analysis

Food Management

Heat Treatment

Hygiene

Microbiology

Nutrition

Preservation

**Quality Control** 

### Skills learnt include:

- applying quality control procedures to food processing and handling
- applying principles of food preservation and hygiene to processing operations
- performing physical, chemical, microbiological and organoleptic analysis and evaluation of food
- analysing the nutritional changes in the life-span of food

# Examples of qualifications include:

1 591 Master of Science in Food Technology
 Master of Applied Science in Food Engineering

2 591 Graduate Diploma in Food Science Graduate Diploma in Dairy Technology

3 591 Bachelor of Applied Science in Food Science and Technology

Bachelor of Applied Science in Wine Science Bachelor of Applied Science in Oenology 5 591 Associate Diploma of Applied Science in Food Technology

> Associate Diploma in Food Technology Associate Diploma in Dairy Technology

7 591 Certificate of Meat Inspection Certificate of Food Processing Certificate in Cane Testing

# 592 Laboratory Technology

**Laboratory Technology** is the study of laboratory techniques and equipment used in biological, chemical, medical and other laboratories.

#### Subjects studied include:

Anatomy and Physiology

**Biochemistry** 

**Biology** 

Chemistry

Cytology

Genetics

Geology

Haematology

Histology

**Laboratory Procedures** 

**Mathematics** 

Microbiology

**Physics** 

**Statistics** 

**Technical Communications** 

- preparing, analysing and classifying laboratory specimens
- applying the principles of laboratory safety and ethics
- maintaining an efficient and effective system for recording results

- · using and maintaining laboratory equipment
- researching, developing and evaluating new laboratory and field techniques

- 1 592 Master Applied Science in Medical Laboratory Science
- 2 592 Graduate Diploma in Medical Technology
- 3 592 Bachelor of Applied Science in Medical Laboratory Science
- 5 592 Associate Diploma of Applied Science in Laboratory Techniques
   Associate Diploma of Applied Science in Pathology
- 6 592 Certificate in Medical Laboratory Science
- 7 592 Certificate in Laboratory Practices
  Certificate of Applied Science in Science
  Laboratory
  Certificate in Laboratory Assisting

# 599 Other Natural and Physical Sciences, nec

Other Natural and Physical Sciences, nec is the study of all Other Natural and Physical Sciences not elsewhere classified in Narrow Field 59 Other Natural and Physical Sciences.

- 1 599 Master of Applied Science in Conservation of Cultural Materials
- 3 599 Bachelor of Applied Science in Cultural Materials Conservation

# Broad Field 6 Engineering

**Engineering** is the study of the design, composition, manufacture, maintenance and functioning of machines, products, systems and structures. It also includes the measurement and mapping of the earth's surface and its natural and constructed features.

The theoretical content of Broad Field 6 Engineering includes:

- · physical science
- · mathematical science
- materials science
- mechanics
- thermodynamics
- systems analysis
- land information technology
- engineering and manufacturing technology
- principles of design and drafting

The main purpose of this broad field of study is to develop an understanding of the conversion of materials and energy, and the measurement and representation of objects.

Fields of study in this broad field are classified into the following narrow fields:

- 61 Surveying and Cartography
- 62 Civil Engineering
- 63 Electrical and Electronic Engineering
- 64 Mechanical Engineering
- 65 Metallurgical and Mining Engineering
- 66 Printing
- 67 Automotive Engineering
- 68 Textiles, Clothing and Footwear
- 69 Other Engineering

#### **Exclusions:**

Architecture and Building are excluded from this broad field as they are more concerned with the construction of buildings than with general engineering. They are sufficiently specialised to form a distinct and separate broad field, Broad Field 7 Architecture and Building.

# Surveying and Cartography

Surveying and Cartography is the study of measuring and graphically representing natural and constructed features of the environment.

The focus of courses in surveying and cartography is site investigation, land boundaries, land information systems, hydrography and the representation of the earth's features.

Courses of study in Surveying and Cartography aim to develop:

- an understanding of the theory and technology of surveying in determining location and position
- an understanding of cadastral law
- an understanding of land information management systems for maintaining accurate and up to date information on land use
- an understanding of the theory and technology of map design and construction
- the ability to organise, cost and complete the tasks required in survey projects and map production

Fields of study in this narrow field are classified into the following detailed fields:

- 611 Surveying
- 612 Cartography

#### 611 Surveying

**Surveying** is the study of measuring and representing the shape, contour, locations and dimensions of the constructed and natural features of the earth, in the form of reports and plans.

Subjects studied include:

Cadastral Practice

Civil Engineering Drawing

Geodesy

Land Law

Photogrammetry and Remote Sensing

**Programming** 

**Survey Computations** 

**Survey Drafting** 

#### Skills learnt include:

- researching existing records and maps to assist in determining survey requirements
- measuring, reducing and adjusting data for various types of surveys
- using surveying instruments such as electronic distance measurers and theodolites to determine the position of points on the earth's surface

- developing and applying survey and design procedures for preparing survey plans
- presenting land information in plan and report formats

Examples of qualifications include:

1 611 Master of Surveying

Master of Applied Science in Surveying

Graduate Diploma in Remote Sensing

Graduate Diploma in Hydrographic Surveying

**Bachelor of Surveying** 

Bachelor of Applied Science in Mine and **Engineering Surveying** 

Bachelor of Land Information in Surveying

5 611 Associate Diploma in Applied Science in

Surveying

Associate Diploma in Survey Drafting

Certificate of Technology in Survey Drafting

6611 Certificate in Surveying

Certificate in Land and Engineering Survey **Drafting** 

# 612 Cartography

Cartography is the study of graphically representing the constructed and natural features of the earth in the form of maps.

# Subjects studied include:

Computer Assisted Mapping Geography Geology Map Design and Drafting Photogrammetry Reprographics Surveying Terrain Analysis

# Skills learnt include:

- applying graphic communication techniques to map production
- · preparing, editing and revising maps and charts
- preparing finished maps for reproduction and publication
- using techniques such as remote sensing, photogrammetry and land information systems to prepare maps

# Examples of qualifications include:

- 3 612 Bachelor of Applied Science in Cartography Bachelor of Arts in Cartography
- 4 612 Diploma of Cartography
- 5 612 Associate Diploma of Engineering in Cartography

Associate Diploma of Applied Science in Cartography

Associate Diploma of Cartography

6612 Certificate of Cartography

# Civil Engineering

**Civil Engineering** is the study of planning, designing, testing and directing the construction of large scale buildings and structures, and transport, water supply, pollution control and sewage systems. It includes economic, functional and environmental considerations in the design and construction.

The focus of courses in Civil Engineering is the planning and design of infrastructures, construction techniques and materials, soil mechanics and project management.

Courses of study in Civil Engineering aim to develop:

- an understanding of the theory and technology of civil engineering and their application to the construction process
- an understanding of the effects of soils, water and stress on structures
- · an understanding of the environmental impact of civil engineering projects
- the ability to design, organise and co-ordinate civil engineering projects

Fields of study in this narrow field are classified to the following detailed field:

621 Civil Engineering

# 621 Civil Engineering

Civil Engineering is the study of planning, designing, testing, and directing the construction of large scale buildings and structures, and transport, water supply, pollution control and sewerage systems. It incorporates economic, functional and environmental considerations in the design and construction.

# Subjects studied include:

**Building Construction** 

Civil Engineering Drawing and Design

Computing

**Engineering Cost Management** 

**Engineering Materials** 

Fluid Mechanics

Geomechanics

Hydraulics

Hydrology

**Mathematics** 

**Physics** 

Stress and Structural Analysis

#### Skills learnt include:

 analysing the composition and strength of various engineering materials

- analysing sites and applying the principles of soil mechanics to determine construction methods
- applying the principles of fluid mechanics and hydraulics to the design and construction of watercourses and dams
- designing civil engineering projects
- preparing and interpreting specifications, drawings and plans

# Examples of qualifications include:

- 1 621 Master of Applied Science in Civil Engineering Master of Engineering in Structural Engineering
- 2 621 Graduate Diploma in Water Engineering Graduate Diploma of Engineering in Municipal Engineering

Graduate Diploma in Structural Computations
Bachelor of Engineering in Civil Engineering

Bachelor of Engineering in Structural
Engineering

5 621 Associate Diploma of Engineering in Civil

Engineering
Associate Diploma of Engineering in Municipal

Engineering
Certificate of Technology in Civil Engineering

6 621 Certificate of Structural Engineering

# Electrical and Electronic Engineering

**Electrical and Electronic Engineering** is the study of planning, designing, developing, testing, installing and maintaining electrical and electronic equipment, machinery and systems. It includes designing and maintaining computers and equipment for communication, navigation, entertainment, and electrical power generation and distribution.

The focus of courses in Electrical and Electronic Engineering is electrical and electronic systems, machinery and equipment.

Courses of study in Electrical and Electronic Engineering aim to develop:

- an understanding of the theory and technology of electrical and electronic engineering
- an understanding of the installation, testing, maintenance and repair of electrical and electronic equipment, machinery and systems
- an understanding of electrical safety and safety regulations
- · an understanding of electrical and electronic wiring, circuitry and componentry
- the ability to organise, co-ordinate, and complete the tasks required in the design, testing, installation, maintenance and repair of electrical and electronic systems and equipment

Fields of study in this narrow field are classified into the following detailed fields:

- 631 Electrical and Electronic Engineering Science
- 632 Powerline Installation and Maintenance
- 633 Electrical Fitting
- 634 Automotive Electrics
- 635 Refrigeration and Air-Conditioning Mechanics
- 636 Electrical Mechanics
- 637 Communications Equipment Installation and Maintenance
- 638 Electronic Equipment Servicing
- 639 Electrical and Electronic Engineering, nec

# 631 Electrical and Electronic Engineering Science

Electrical and Electronic Engineering Science is the study of planning, designing, developing and maintaining electrical and electronic equipment, machinery and systems. It includes designing computers and equipment for communication, navigation, entertainment and power generation.

Subjects studied include:

Communication Systems
Computer Engineering
Computer Systems Instrumentation
Control Systems
Digital Techniques
Electromagnetics
Electromechanical Systems

Electronic Circuits
Energy Generation
Engineering Drawing and Design
Engineering Materials
Mathematics
Network and Signal Theory
Physics
Systems Engineering

- designing electrical and electronic circuits and systems
- preparing and interpreting specifications, drawings and regulations
- analysing the performance of electrical and electronic systems

1 631 Master of Engineering Science in Computer Engineering

Master of Engineering in Electrical and Electronic Engineering

2 631 Graduate Diploma in Telecommunications Graduate Diploma of Engineering in Communication Systems

3 631 Bachelor of Engineering in Electrical Engineering

Bachelor of Computer Systems Engineering

5 631 Associate Diploma of Engineering in Electronic Engineering
Associate Diploma in Digital Systems
Advanced Certificate in Electrical Engineering

6 631 Certificate in Electronics Engineering Trade Certificate in Electrical Drafting

7 631 Certificate in Microprocessor System Techniques

# 632 Powerline Installation and Maintenance

**Powerline Installation and Maintenance** is the study of installing, repairing, maintaining and monitoring overhead and underground electrical power distribution networks.

Subjects studied include:

Electrical Theory
Cable Joining
Powerline Construction
Powerline Maintenance
Electrical Safety

#### Skills learnt include:

- installing, maintaining, and repairing overhead and underground electric powerlines and aerial equipment
- monitoring and testing power cable quality and performance
- testing the adequacy of various types of powerline insulation
- splicing and jointing conductors, and adjusting tensions
- locating faults in powerlines

# Examples of qualifications include:

6 632 Trade Certificate in Electrical Lineswork Certificate in Electrical Cable Joining

# 633 Electrical Fitting

**Electrical Fitting** is the study of maintaining, diagnosing faults in and repairing electrical equipment and their components.

# Subjects studied include:

Circuits

**Electrical Drawing** 

**Electrical Fitting and Machining** 

**Electrical Principles** 

**Electrical Theory** 

**Electric Motors** 

#### Skills learnt include:

- tracing and diagnosing faults in electrical circuits and appliances
- examining and interpreting blueprints, wiring diagrams and specifications
- installing and repairing wiring systems and components
- using equipment including lathes, drilling machines, hand tools and welding equipment

# Examples of qualifications include:

6 633 Apprenticeship in Electrical Fitting
Trade Certificate in Electrical Fitting and
Turning

7 633 Certificate in Electrical Fitting and Armature Winding

#### 634 Automotive Electrics

Automotive Electrics is the study of installing, maintaining, repairing and diagnosing faults in electrical wiring and components in automotive vehicles.

#### Subjects studied include:

**Automotive Circuits** 

Capacitance

Cells and Batteries

Charging Systems

**Electrical Theory** 

Electronic Fuel Injection

**Ignition Systems** 

Magnetism

Vehicle Lighting Systems

- adjusting engine control systems and timing
- installing and repairing electrical wiring and components including alternators, starter motors and capacitors in automobiles
- testing and locating automotive electrical faults

5 634 Advanced Certificate in Automotive Electrics

6 634 Trade Certificate in Automotive Electrical Fitting

Trade Certificate in Automotive Electrical Apprenticeship in Automotive Electrics

7 634 Certificate in Automotive Electrics

# 635 Refrigeration and Air-Conditioning Mechanics

Refrigeration and Air-Conditioning Mechanics is the study of installing, maintaining, diagnosing faults in and repairing domestic, commercial and industrial refrigeration and air-conditioning equipment.

# Subjects studied include:

Commercial Refrigeration
Compressors, Condensers and Evaporators
Electrical Theory
Fabrication Processes
Fluid Systems and Controls
Heating and Ventilation
Industrial and Domestic Airconditioning
Industrial and Domestic Refrigeration
Refrigerant Flow Controls
Refrigeration Drawing

# Skills learnt include:

- installing, maintaining and repairing refrigeration and air-conditioning equipment
- · checking for leaks using gas or fluid
- adjusting installed systems for optimum operating efficiency

# Examples of qualifications include:

5 635 Associate Diploma of Refrigeration and Air Conditioning

5 Trade Certificate in Refrigeration Mechanics Certificate in Air Conditioning Mechanics Trade Certificate in Heating, Ventilation and Air Conditioning

Certificate of Technology in Air Conditioning

7 635 Certificate in Refrigeration and Air Conditioning

### 636 Electrical Mechanics

Electrical Mechanics is the study of installing, maintaining, re-routing, repairing and diagnosing faults in electrical wiring and related equipment in domestic, commercial and industrial establishments, ships and trains.

#### Subjects studied include:

Capacitors and Capacitance in AC/DC Circuits
Earthing
Electrical Practice
Electrical Theory and Principles
Power Supply and Distributors
SAA Wiring Rules
Testing and Fault Finding in Equipment
Welding

#### Skills learnt include:

- replacing defective components and reassembling electrical units
- reading and interpreting wiring diagrams to determine layout of wiring systems
- installing, maintaining and repairing electrical wiring systems and fittings including light switches, switchboards and earthing systems
- testing circuit continuity using a variety of instruments to ensure electrical compatability and safety

# Examples of qualifications include:

6 636 A Grade Certificate in Electrical Mechanics B Grade Certificate in Electrical Mechanics Apprenticeship in Electrical Mechanics

7 636 Certificate in Electrical Mechanics

# 637 Communications Equipment Installation and Maintenance

Communications Equipment Installation and Maintenance is the study of installing, maintaining, operating, repairing and diagnosing faults in telecommunications equipment, appliances, instruments and systems.

### Subjects studied include:

Amplifiers
Communications
Electrical Principles and Theory
Electronics
Information Technology
Modulation and Demodulation
Receivers and Transmitters
Transmission Lines and Antennae

- operating and adjusting broadcast station equipment
- installing, maintaining and repairing telephone, radio and computer transmission equipment
- · testing and replacing faulty equipment
- installing underground cables for telephone and other communications transmissions

- 5 637 Broadcast Station Operators Certificate of Proficiency
- 6 637 Trade Certificate in Telecommunications
- 7 637 Traineeship Certificate in Telecommunications Installer Broadcast Station Operators Certificate

# 638 Electronic Equipment Servicing

Electronic Equipment Servicing is the study of maintaining, diagnosing faults in and repairing computers, radio and television receivers, audio, video, and other electronic equipment.

# Subjects studied include:

**Amplifiers** 

Audio and Radio Circuitry

Digital and Analogue Systems

**Electrical Theory and Principles** 

**Electronic Components** 

**Electronic Networks** 

Instrument Electronics

Receiver Techniques

**Transducers** 

#### Skills learnt include:

- · reading and interpreting circuit diagrams
- wiring, installing and testing electronic equipment
- diagnosing and locating faults, and replacing and repairing faulty componentry

Examples of qualifications include:

- 5 638 Technician Certificate in Colour Television Receivers
- 6 638 Trade Certificate in Radio and Television Mechanics
- 7 638 Certificate in Colour Video Display Systems Certificate in Electronic Servicing Radio Servicing Certificate

# 639 Electrical and Electronic Engineering, nec

Electrical and Electronic Engineering, nec is the study of all Electrical and Electronic Engineering not elsewhere classified in Narrow Field 63 Electrical and Electronic Engineering.

- 3 639 Bachelor of Engineering in Microelectronics
- 5 639 Certificate of Technology in Medical Electronics
- 6 639 Trade Certificate in Industrial Electronics Apprenticeship in Meter Mechanics
- 7 639 Certificate of Semiconductor Electronics Certificate of Industrial Electronics Certificate in Basic Electronics

# Mechanical Engineering

**Mechanical Engineering** is the study of planning, designing, developing, producing and maintaining, machines, mechanical plants and systems, and metal products. It includes designing and maintaining machines which generate energy, produce goods and services, control pollution, dispose of waste, and move goods and materials.

The focus of courses in Mechanical Engineering is machines, mechanical systems and metal products.

Courses of study in Mechanical Engineering aim to develop:

- an understanding of the theory and technology of mechanical engineering
- · an understanding of planning, designing, installing, maintaining and repairing plant, machinery and tools
- an understanding of fabricating, casting and welding metals
- an understanding of the technology and techniques of assembling, maintaining and repairing aircraft parts and systems
- the ability to organise, co-ordinate and complete the tasks required in the design, installation, testing, maintenance and repair of machines, plant, equipment and tools

Fields of study in this narrow field are classified into the following detailed fields:

- 641 Mechanical Engineering Science
- 642 Toolmaking
- 643 Metal Fitting, Turning and Machining
- 644 Sheetmetal Working
- 645 Boilermaking and Welding
- 646 Metal Casting and Patternmaking
- 647 Aircraft Maintenance Engineering
- 648 Precision Metal Working
- 649 Mechanical Engineering, nec

### **Exclusions:**

Automotive Engineering is excluded from this narrow field as it is sufficiently specialised to form a separate and distinct narrow field, Narrow Field 67 Automotive Engineering.

# 641 Mechanical Engineering Science

Mechanical Engineering Science is the study of planning, designing and developing machines, mechanical plants and systems.

Subjects studied include:

Applied Mechanics

**Automatic Control** 

**Dynamics** 

**Electrical Engineering** 

**Engineering Materials** 

Fluid Mechanics

**Mathematics** 

Mechanical Engineering Drawing and Design

**Physics** 

Stress Analysis

Thermodynamics

Tribology

- analysing the effects of stresses and strains on machinery, plant and equipment
- operating and maintaining mechanical systems
- · designing and drafting mechanical components
- undertaking materials investigation and analysis

1 641 Master of Engineering Science in Mechanical Engineering Master of Applied Science in Mechanical

Engineering

2 641 Graduate Diploma of Engineering in Plant
Management

Graduate Diploma in Maintenance Engineering Graduate Diploma in Welding Technology

3 641 Bachelor of Engineering in Mechanical Engineering

5 641 Certificate of Technology in Mechanical Design Drafting

Associate Diploma of Fabrication Engineering Associate Diploma in Mechanical Engineering Advanced Certificate in Mechanical Engineering

6 641 Trade Certificate in Mechanical Engineering

7 641 Certificate in Mechanical Drawing Certificate of Industrial Hydraulics

# 642 Toolmaking

**Toolmaking** is the study of making and repairing tools, dies, jigs, fixtures and other precision parts.

Subjects studied include:

Die Sinking
Foundry Engineering and Practices
Jigs and Fixtures
Metallurgy
Precision Machining
Press Tools
Print Reading
Tool and Die Construction

Tool Drawing
Toolmaking Theory

# Skills learnt include:

- utilising the properties of various metals, alloys and plastics for toolmaking
- operating hand and machine tools used for precision toolmaking
- reading and interpreting blueprints and specifications in order to determine dimensions and tolerances of articles to be manufactured

Examples of qualifications include:

5 642 Certificate of Technology in Tool Design Advanced Certificate in Toolmaking

6 642 Trade Certificate in Toolmaking

7 642 Pre-Apprenticeship Certificate in Toolmaking Certificate in Jig Drafting

# 643 Metal Fitting, Turning and Machining

Metal Fitting, Turning and Machining is the study of setting up machining tools, production machines and textile machines, operating machining tools and machines to shape metal stock and castings, and fitting and assembling the fabricated metal parts into products.

Subjects studied include:

Brazing
Grinding and Shaping
Jobbing
Lathe Work
Machine Servicing and Maintenance
Numerical Control Machining
Precision and Programmable Machining
Print Reading and Interpretation
Production Fitting and Tooling
Screw and Gear Cutting
Workshop Drawing

#### Skills learnt include:

- machining including turning, gearcutting, milling and computer controlled machining
- assembling and fitting manufactured parts and sub-assemblies
- setting up and operating machine tools to shape metal stocks
- reading and interpreting blueprints and job specification cards in order to determine suitable materials, methods and sequences of operation and machine settings

Examples of qualifications include:

6 643 Trade Certificate in Fitting and Machining Trade Certificate in Plant Mechanics Trade Certificate in Diesel Fitting

7 643 Pre-Apprenticeship Certificate in Fitting and Machining

Certificate in Farm Mechanics Certificate of Mechanical Fitting Certificate of Fitting and Turning

# 644 Sheetmetal Working

**Sheetmetal Working** is the study of cutting, shaping and joining sheetmetal using hand and power tools and machines, and assembling and installing sheetmetal products.

Subjects studied include:

Coppersmithing Electric Arc Welding Marking Off Metal Fabrication and Design Oxy Welding Sheetmetal Calculations and Drawing Sheetmetal Practice Ventilation Drawing and Technology

#### Skills learnt include:

- examining detailed drawings and specifications to determine job material and equipment requirements
- cutting, shaping and finishing sheetmetal products using various tools and techniques
- marking out stock using templates, gauges and other measuring instruments

# Examples of qualifications include:

- 5 644 Advanced Certificate in Sheetmetal Working
- 6 644 Trade Certificate in Coppersmithing
  Trade Certificate in Sheetmetal Working
  Trade Certificate in Metal Spinning
- 7 644 Certificate in Sheetmetal Work Certificate in Sheetmetal

# 645 Boilermaking and Welding

Boilermaking and Welding is the study of marking off, cutting, shaping and joining metals. It includes constructing and repairing steelwork structures, pressure pipes, ships and boilers.

# Subjects studied include:

Cutting and Gauging
Engineering Drawing
Fabrication Techniques
Fitting and Machining
Foundry Skills
Layout and Marking Off
Metallurgy
Plate and Pipe Work
Structural Steelwork
Welding Techniques and Technologies

#### Skills learnt include:

- examining metals to determine method of welding required
- using appropriate welding techniques to join metals
- inspecting welds to determine strength, precision and possible defects
- · cutting, forming and assembling boilers

#### Examples of qualifications include:

5 645 Certificate of Technology in Welding Advanced Certificate in Metal Fabrication

6 645 Certificate in Boiler Inspection
Certificate in Welding Supervision
Trade Certificate in Metal Fabrication

7 645 Certificate in Metal Fabrication Certificate in Boilermaking Certificate in Welding

# 646 Metal Casting and Patternmaking

Metal Casting and Patternmaking is the study of planning and fabricating mould patterns and cores, and founding metals.

# Subjects studied include:

Casting Technologies
Core Moulding Processes
Foundry Practice
Moulding Techniques
Non-Ferrous Technologies
Pattern Costing and Standards
Pattern Design and Production
Properties of Metals
Shrinkage and Contraction

#### Skills learnt include:

- moulding, coremaking and casting ferrous and non-ferrous alloys
- interpreting drawings to estimate the weight of castings
- designing and fabricating metallic and non-metallic patterns, moulds and cores
- determining the appropriate materials and techniques for moulding and casting metals

#### Examples of qualifications include:

- 5 646 Associate Diploma in Foundry Technology Technician Certificate in Foundry Practice
- 6 646 Trade Certificate in Foundry
  Trade Certificate in Patternmaking
  Apprenticeship in Moulding and Coremaking
- 7 646 Certificate in Patternmaking

# 647 Aircraft Maintenance Engineering

Aircraft Maintenance Engineering is the study of assembling, maintaining and repairing airframes, engines, electrical and mechanical instruments, and related aircraft systems.

#### Subjects studied include:

Aircraft Engine Overhaul
Aircraft Hydraulics and Pneumatics
Aircraft Instrument and Electrical Systems
Aircraft Structures
Airworthiness
Aviation Science and Technology
Control Mechanisms
Gas Turbine Principles
Helicopter Airframe Structures
High Speed Flight
Landing Gear
Propeller Principles

# Skills learnt include:

- conducting diagnostic tests to determine the nature of radio and instrument malfunctions
- testing, maintaining and servicing aircraft engines, airframe components and systems
- repairing and replacing defective parts and components

# Examples of qualifications include:

6 647 Trade Certificate in Aircraft Maintenance Engineering

Trade Certificate in Aircraft Mechanical Maintenance

Trade Certificate in Aircraft Mechanics

# 648 Precision Metal Working

**Precision Metal Working** is the study of designing, fabricating, assembling, maintaining and repairing precision instruments.

# Subjects studied include:

Balance and Balance Springs Drawing Fitting Lathe Work Machining Tool and Cutter Grading Welding

#### Skills learnt include:

- repairing parts and sub-assemblies of locks, timepieces and small arms using precision instruments
- assembling and disassembling precision instruments using hand tools, measuring instruments and magnifying aids
- calibrating instruments using standard weights and measures
- making and repairing blades for various saws
- engraving ornamental inscriptions on fine metal work and jewellery

# Examples of qualifications include:

6 648 Certificate in Saw Doctoring
Trade Certificate in Saw Doctoring and Making
Trade Certificate in Locksmithing
Apprenticeship in Watchmaking
Trade Certificate in Watchmaking

# 649 Mechanical Engineering, nec

Mechanical Engineering, nec is the study of all Mechanical Engineering not elsewhere classified in Narrow Field 64 Mechanical Engineering.

- 2 649 Graduate Diploma in Metal Finishing and Surface Protection
- 5 649 Advanced Certificate in Electrolytic Finishing Technician Certificate in Mechanical Metal Finishing
- 6 649 Apprenticeship in Electroplating
  Trade Certificate in Farriery
  Trade Certificate in Industrial Blacksmithing
- 7 649 Certificate in Metal Finishing Pre-Apprenticeship Certificate in Farriery

# Metallurgical and Mining Engineering

Metallurgical and Mining Engineering is the study of locating, assaying and extracting minerals from the earth, refining metals, and producing and analysing the properties of alloys, ceramics, polymers and other materials.

The focus of courses in Metallurgical and Mining Engineering is extractive techniques, analysis and refinement of minerals, and materials science.

Courses of study in Metallurgical and Mining Engineering aim to develop:

- an understanding of the theory and technology of metallurgical and mining engineering
- an understanding of the extraction, processing and refinement of minerals
- an understanding of the treatment and manufacture of metals, alloys, ceramics, polymers and other materials
- an understanding of the management, regulatory and safety aspects of mineral and metallurgical production
- the ability to organise, co-ordinate and maintain mining and processing operations

Fields of study in this narrow field are classified into the following detailed fields:

- 651 Metallurgical Engineering Science
- 652 Mining Engineering Science
- 659 Metallurgical and Mining Engineering, nec

# 651 Metallurgical Engineering Science

Metallurgical Engineering Science is the study of assaying, producing and refining materials, including metals, alloys, ceramics and polymers. It includes developing and implementing extraction and treatment procedures.

#### Subjects studied include:

Ceramics and Polymers Chemistry

Chemsuy

Crystal Growth

Electrochemistry and Corrosion

**Environmental Principles** 

**Extractive Metallurgy** 

Materials Analysis and Testing

**Materials Science** 

**Mineral Processing** 

**Physics** 

Stress Analysis

Structure and Properties of Materials

#### Skills learnt include:

- analysing the structure, composition and properties of ceramic, metallic, polymeric and composite materials
- developing techniques for producing and processing materials
- applying chemical and metallurgical techniques to the commercial production of metals and alloys

# Examples of qualifications include:

- 1 651 Master of Applied Science in Metallurgy Master of Applied Science in Materials Engineering
- 2 651 Graduate Diploma in Extractive Metallurgy Graduate Diploma in Materials Technology
- 3 651 Bachelor of Applied Science in Metallurgy Bachelor of Engineering in Ceramics Engineering

Bachelor of Metallurgical Engineering

5 651 Associate Diploma in Metals Technology Associate Diploma of Applied Science in Metallurgy

Certificate in Metallurgy

7 651 Certificate in Assaying

# 652 Mining Engineering Science

Mining Engineering Science is the study of planning, developing, assessing and directing the extraction of minerals, oil and gas from the earth.

# Subjects studied include:

Aerial Photogrammetry and Field Mapping

**Drilling and Blasting** 

Geomechanics

Materials Handling

Mine Surveying

Mine Plant Design

Mineral Processing

Mining Methods

Mining Safety, Health and Legislation

Ore Petrology

Ore Reserve Estimation

Thermofluids

**Tunnelling** 

#### Skills learnt include:

- applying the principles and practices of management and safety to the efficient operation of mines
- developing methods of controlling gas and oil extraction
- surveying, designing and constructing mines
- surveying mineral deposits to assess the economic feasibility of mining

Examples of qualifications include:

- 1 652 Master of Applied Science in Mining and Mineral Technology
   Master of Mining Engineering
- 2 652 Graduate Diploma of Mining Graduate Diploma of Engineering in Petroleum Engineering
- 3 652 Bachelor of Engineering in Geological Engineering

Bachelor of Applied Science in Mining Engineering

- 5 652 Associate Diploma of Applied Science in Coalmining Certificate of Technology in Extractive Industry
- 6 652 Certificate in Coalmining
- 7 652 Certificate in Mine Deputy Certificate in Mining

# 659 Metallurgical and Mining Engineering, nec

Metallurgical and Mining Engineering, nec is the study of all Metallurgical and Mining Engineering not elsewhere classified in Narrow Field 65 Metallurgical and Mining Engineering.

- 1 659 Master of Applied Science in Materials Science
- 2 659 Graduate Diploma in Materials Science
- 3 659 Bachelor of Applied Science in Materials Science
- 7 659 Certificate in Quarry Supervision

# Printing

**Printing** is the study of reproducing texts and pictorial works onto any media from original plates and masters, and producing finished publications. It includes the study of operating printing machinery.

The focus of courses in Printing is printing techniques, surfaces and materials, design, composition and layout, and binding and finishing techniques.

Courses of study in Printing aim to develop:

- an understanding of different printing techniques and their applications
- an understanding of the various technologies used in the printing and finishing process
- an understanding of design, layout and colour matching
- the ability to cost, organise and complete the production of commercial printing to acceptable standards

Fields of study in this narrow field are classified into the following detailed fields:

- 661 Compositing
- 662 Graphic Reproduction
- 663 Printing Machining
- 664 Binding and Finishing
- 665 Screen Printing
- 669 Printing, nec

# 661 Compositing

Compositing is the study of typesetting and page layout in preparation for printing.

Subjects studied include:

Block and Plate Preparation
English Grammar and Use
Hand, Photo and Machine Composition
Layout and Design
Typesetting
Typography

# Skills learnt include:

- designing and preparing page layouts
- · typesetting, imposition and proofing
- identifying and classifying type and lettering for layouts
- interpreting mark-up instructions and standards of presentation
- using processing techniques including bromide make-up, diffusion transfer techniques, film make-up and camera work

Examples of qualifications include:

6 661 Trade Certificate in Printing Composition
 Apprenticeship in Printing Composing
 7 661 Certificate in Printing Composing

# 662 Graphic Reproduction

Graphic Reproduction is the study of reproducing drawings, photographs, paintings, and other pictorial material for printing.

Subjects studied include:

Camera and Electronic Imaging
Computer Graphics
Film Combining and Retouching
Graphic Reproductive Technology
Image Preparation
Photoengraving and Gravure Platemaking
Plate and Cylinder Preparation
Scanning and Retouching

#### Skills learnt include:

- reproducing images from film to plates and cylinders
- integrating graphic reproduction with the major printing processes
- assessing the suitability of master copies for print processes
- examining proofs to verify quality of plates and cylinders

Examples of qualifications include:

6 662 Apprenticeship in Graphic Reproduction Trade Certificate in Graphic Reproduction

# 663 Printing Machining

**Printing Machining** is the study of setting up, operating and monitoring printing presses. It excludes the operation of screen printing machines.

Subjects studied include:

Colour Printing Flexography and Gravure Printing Lithography Rotary Printing

Stereotyping

Webb Offset Printing

#### Skills learnt include:

- using letterpress and lithograph printing processes
- sensitising and desensitising plates and cylinders
- operating ordinary, small and automatic presses
- using flexographic and gravure printing techniques
- monitoring press operations to check print quality and to check for malfunctions

Examples of qualifications include:

6 663 Apprenticeship in Printing Machining Trade Certificate in Printing Machining

7 663 Printing Machining Certificate

# 664 Binding and Finishing

**Binding and Finishing** is the study of gathering pages and assembling them into books and other publications. It includes decorating, lettering and polishing covers.

Subjects studied include:

Guillotine Operation Hot Foil Stamping Machine Folding Paper Handling Trimming Types of Binding

#### Skills learnt include:

- operating guillotines for pre- and post- press paper cutting and trimming
- using and caring for hand tools and mechanical binding equipment
- collating and preparing pages for binding
- using various techniques for finishing publications

Examples of qualifications include:

6 664 Apprenticeship in Binding and Finishing Trade Certificate in Binding and Finishing Trade Certificate in Bookbinding

7 664 Bookbinding and Finishing Certificate
Bookbinding Certificate

# 665 Screen Printing

Screen Printing is the study of printing images by forcing ink through a mesh screen over a stencil.

Subjects studied include:

Colour Matching
Frames and Meshes
Graphics and Layout
Inks and Dyes
Printing on Ceramics and Fa

Printing on Ceramics and Fabrics

Stencil Preparation

#### Skills learnt include:

- preparing stencils using handcutting and photographic techniques
- selecting, mixing and matching coloured inks
- · designing stencils and layout
- using stencils and meshes to print on a variety of media

Examples of qualifications include:

6 665 Trade Certificate in Screen Printing and Stencil Preparation

Trade Certificate in Screen Printing

7 665 Certificate in Screenprinting and Stencil Preparation

# 669 Printing, nec

**Printing, nec** is the study of all Printing not elsewhere classified in Narrow Field 66 Printing.

Examples of qualifications classified to this detailed include:

6 669 Trade Certificate in Reprographics

# Automotive Engineering

**Automotive Engineering** is the study of planning, designing, developing, producing and maintaining motor vehicles and their non-electrical components including earth moving equipment, motor cycles and small engines.

The focus of courses in Automotive Engineering is motor vehicles, earth moving equipment, small engines and their components.

Courses of study in Automotive Engineering aim to develop:

- an understanding of the theory and practice of the design, production and functioning of motor vehicles
- an understanding of vehicle body building, repair, painting and trimming
- an understanding of maintaining and repairing motor vehicles, earth moving plant, motor cycles and small engines
- the ability to organise, cost and complete the tasks required in the design, construction and maintenance of motor vehicles and their non-electrical components

Fields of study in this narrow field are classified into the following detailed fields:

- 671 Automotive Engineering Science
- 672 Vehicle Mechanics
- 673 Panel Beating
- 674 Vehicle Painting
- 675 Vehicle Building
- 676 Vehicle Trimming
- 679 Automotive Engineering, nec

# 671 Automotive Engineering Science

Automotive Engineering Science is the study of designing, developing and testing motor vehicles, earth moving equipment, small engines and their components.

Subjects studied include:

**Applied Engine Power** 

Automotive Design

**Emission Control** 

**Engineering Mathematics** 

**Engineering Science** 

**Materials Science** 

Technical Drawing and Communication

Torque

# Skills learnt include:

- designing and developing motor vehicles, earth moving equipment, small engines and their components
- applying the theory and practice of engineering mathematics and science in relation to automotive practice

- interpreting and applying standards to the design of motor vehicles and components
- testing and evaluating vehicle performance and safety

Examples of qualifications include:

5 671 Advanced Certificate in Automotive Engineering

# 672 Vehicle Mechanics

Vehicle Mechanics is the study of maintaining, diagnosing faults in, repairing and servicing motor vehicles and their components. It includes repairing small engines in boats, motorcycles, lawnmowers, generators and related equipment.

Subjects studied include:

Braking Systems
Clutches and Transmissions
Cooling and Fuel Engine Fitting
Drive Lines and Axle Assemblies

Fault Diagnosis
Fitting and Machining
Frames, Suspension and Steering
Fuel and Emission Control
Fuel Injection Systems
Internal Combustion Engines
Welding
Wheel Balancing and Alignment

#### Skills learnt include:

- using workshop manuals to dismantle faulty assemblies
- checking exhaust emissions and tuning engines to achieve better performance
- diagnosing faults in, servicing and repairing automotive systems and components
- reboring cylinders in engines

# Examples of qualifications include:

5 672 Advanced Certificate in Automotive Mechanics

6 672 Trade Certificate in Automotive Fitting and Turning

Trade Certificate in Small Engine Mechanics

Trade Certificate in Brake Mechanics

Trade Certificate in Fuel Injection Fitting

7 672 Certificate in Motor Mechanics

Pre-vocational Certificate in Automotive

Mechanics

# 673 Panel Beating

**Panel Beating** is the study of repairing damaged motor vehicle bodies and replacing panels.

### Subjects studied include:

Accessory Repair

Aluminium and Plastic Repairs

**Body Frame Alignment** 

Corrosion

**Custom Panel Forming** 

Damage Assessment and Customer Relations

Dismantling and Reassembling

**Electrical and Circuit Protection** 

Fibreglass Reinforced Plastics

Jigs Frame and Wheel Alignment

Metal Finishing Techniques

Motor Body Repair Equipment

Panel Repair

Weather Proofing

Welding

# Skills learnt include:

- dismantling, repairing and reassembling motor body panels
- assessing damage and estimating costs
- automotive spraypainting and the forming of custom panels
- filing, grinding and sanding repaired surfaces

 straightening badly damaged vehicles using mechanical and hydraulic equipment

# Examples of qualifications include:

5 673 Advanced Certificate in Panel Beating

6 673 Trade Certificate in Panel Beating

7 673 Pre-apprenticeship Certificate in Panel Beating

# 674 Vehicle Painting

Vehicle Painting is the study of preparing vehicle surfaces, mixing and matching paint colours and spray painting vehicles including aircraft.

# Subjects studied include:

Acrylic Application

Airbrush Techniques

**Application of Primers** 

Colour Matching and Mixing

**Estimating and Quoting** 

Fillers and Topcoats

Finishing Techniques

Line Work

Spraying Enamels

**Tinters** 

Vehicle Decoration and Signwork

#### Skills learnt include:

- preparing painted and unpainted surfaces, applying primers, fillers and top coats
- using spray painting technology and paint-testing equipment
- analysing, matching and mixing of both metallic and non-metallic paints
- laying out and designing decorations for vehicles
- painting murals, lines and scrolls and signwriting on vehicles

#### Examples of qualifications include:

5 674 Advanced Certificate in Motor Painting

6 674 Trade Certificate in Vehicle Painting Trade Certificate in Spraypainting

7 674 Certificate in Motor Painting
Certificate in Vehicle Colour Matching

# 675 Vehicle Building

Vehicle Building is the study of building vehicle bodies, including trucks, buses, coaches, railway carriages, wagons and fire engines.

## Subjects studied include:

**Body Panel Shaping** 

**Electrical Circuit Layout** 

**Electric Welding** 

**Fastening Methods** 

Fibreglass Reinforced Plastics and Materials

Motorbody Drawing

Oxyacetylene Welding Tool Manufacture

Trimming

Vehicle Building Equipment

Weather Proofing and Sealing

Workshop Safety

#### Skills learnt include:

- utilising the structural properties of materials for vehicle building
- interpreting blueprints, drawings and specifications
- bolting, screwing, riveting and welding sections together to form complete frameworks
- cutting, shaping and attaching panels to frameworks

# Examples of qualifications include:

5 675 Advanced Certificate in Vehicle Bodymaking

6 675 Trade Certificate in Carriage Building
Trade Certificate in Vehicle Building
Trade Certificate in Coach Building

# 676 Vehicle Trimming

Vehicle Trimming is the study of making, installing, repairing and replacing the interior trimmings and upholstery of vehicles including boats, aircraft and railway carriages.

Subjects studied include:

Attachment Methods Canopies and Accessories Carpet Fitting
Custom Trimming
Headlinings
Material Repairing
Panel Trimming
Proofing
Seating Coverings and Inserts
Trade Drawing and Design
Trim Repair
Trim Renovation

#### Skills learnt include:

Vinyl Roof Lining

- fitting and installing trim in vehicles
- making bodies, canopies, tonneau covers, seats and squabs
- removing old coverings and fittings and taking new measurements

# Examples of qualifications include:

6 676 Trade Certificate in Vehicle Trimming

7 676 Pre-apprenticeship Certificate in Vehicle Trimming

# 679 Automotive Engineering, nec

Automotive Engineering, nec is the study of all Automotive Engineering not elsewhere classified in Narrow Field 67 Automotive engineering.

Examples of qualifications include:

6 679 Trade Certificate in Automotive Parts
Interpreting

7 679 Certificate in Automotive Parts

# Textiles, Clothing and Footwear

**Textiles, Clothing and Footwear** is the study of the manufacture, care and repair of textiles, textile and leather products, clothing and related items, shoes and other forms of footwear. It includes the manufacture of soft furnishings.

The focus of courses in Textiles, Clothing and Footwear is textiles, yarns and fabrics, and the manufacture of garments, soft furnishings, footwear and leather products.

Courses of study in Textiles, Clothing and Footwear aim to develop:

- an understanding of the properties of various textiles, fabrics and yarns, and their suitability for different applications
- an understanding of the technology and techniques of textile, yarn and fabric production
- an understanding of the design, manufacture and repair of garments, upholstery and footwear
- the ability to operate equipment used for processing fibres into yarns, and the commercial production of textiles, apparel and upholstery

Fields of study in this narrow field are classified into the following fields:

- 681 Textile Engineering Science
- 682 Garment Making
- 683 Upholstery
- 684 Footwear
- 689 Textiles, Clothing and Footwear, nec

# 681 Textile Engineering Science

**Textile Engineering Science** is the study of the industrial production of textiles, yarns and fabrics. It includes the study of the maintenance and operation of machines used in the textile industry.

Subjects studied include:

Dye and Colouration Techniques

Fibre Technology

**Knitting** 

Mechanical Principles

Plant Management and Services

Spinning

**Textile Chemistry** 

Weaving

Workshop Procedures

Yarn Manufacturing

#### Skills learnt include:

- applying physical, chemical and engineering processes to the manufacture of fibres and yarn
- undertaking research and development into the properties of various textiles, fabrics and yarns

 setting up, adjusting and repairing textile spinning, weaving and tufting machines

#### Examples of qualifications include:

- 1 681 Master of Science in Textile Technology
- 2 681 Graduate Diploma in Textile Technology
- 3 681 Bachelor of Science in Textile Technology
- 5 681 Advanced Certificate in Textile Technology
  Associate Diploma of Textile Technology
- 6 681 Apprenticeship in Textile Mechanics
- 7 681 Certificate of Applied Science in Textile Technology

# 682 Garment Making

**Garment Making** is the study of the commercial production of clothing and other apparel.

#### Subjects studied include:

Equipment and Machinery Fabric Spreading Fashion Sketching and Design Garment Assembly Grading Marking and Cutting Pattern Construction Textiles

#### Skills learnt include:

- drafting and modifing patterns to suit style and size of garment
- planning, organising and supervising garment production
- cutting out parts of garments and hats according to patterns by hand or machine
- assembling and sewing fabric parts together to make a finished product

# Examples of qualifications include:

6 682 Trade Certificate in Fashion Patternmaking Apprenticeship in Apparel Cutting

7 682 Certificate in Commercial Dressmaking
Certificate in Fashion Patternmaking
Certificate in Clothing Assembly
Certificate in Machine Knitting
Certificate in Apparel Machining
Certificate in Fashion Technology

# 683 Upholstery

**Upholstery** is the study of designing, constructing and repairing the soft furnishings of chairs, beds, and bed and chairsprings.

#### Subjects studied include:

Cushion-making
Decoration
Drawing and Calculations
Edge-forming
Facing and Finishing Techniques
Foundations and Springing
Framemaking
Repair, Recover and Reupholstery
Sewing Machining
Upholstery of Various Types of Chair

#### Skills learnt include:

- measuring and cutting covering and padding materials
- making and repairing padding and furniture coverings
- fabricating and attaching springs to furniture frames
- attaching ornamental trims, braids and buttons to covers and frames

### Examples of qualifications include:

5 683 Advanced Certificate in Furnishing Upholstery

6 683 Trade Certificate in Upholstering Apprenticeship in Upholstering

#### **Exclusions:**

Vehicle Trimming is excluded from this detailed field as it is sufficiently specialised to form a distinct and separate detailed field, Detailed Field 676 Vehicle Trimming.

#### 684 Footwear

Footwear is the study of designing, constructing and repairing shoes, boots and other forms of footwear.

# Subjects studied include:

Clicking
Finishing Techniques
Foot Anatomy
Grading and Tanning
Machine Welted Manufacturing
Measurement and Fitting
Pattern Design and Cutting
Stock Fitting
Stuff-cutting and Preparation
Upper Closing and Preparation

#### Skills learnt include:

- cutting out parts using scissors, knives and clicking machines
- operating stitching machines to join, decorate and reinforce shoe parts to form uppers
- repairing footwear
- designing and making orthopaedic shoes and boots

### Examples of qualifications include:

6 684 Trade Certificate in Footwear
Apprenticeship in Footwear
Trade Certificate in Shoe Repairing
Trade Certificate in Surgical Bootmaking

7 684 Certificate in Footwear Machining Certificate in Footwear Certificate in Footwear Design

# 689 Textiles, Clothing and Footwear, nec

Textiles, Clothing and Footwear, nec is the study of all Textiles, Clothing and Footwear not elsewhere classified in Narrow Field 68 Textiles, Clothing and Footwear.

# Examples of qualifications include:

6 689 Apprenticeship in Soft Furnishing Making Apprenticeship in Dry Cleaning

7 689 Certificate in Soft Furnishing
Certificate in Textile Merchandising
Certificate in Dyeing
Certificate in Hand Weaving

# Other Engineering

Other Engineering is the study of all Engineering not included elsewhere in Broad Field 6 Engineering.

Fields of study in this narrow field are classified into the following detailed fields:

691	Chemical Engineering Science
692	Aeronautical Engineering Science
693	<b>Industrial Engineering Science</b>
694	Marine Engineering Science
695	Other Engineering Science
696	Marine Construction
697	Wood Machining and Turning
698	Cabinet Making
699	Other Engineering, nec

# 691 Chemical Engineering Science

Chemical Engineering Science is the study of planning, designing, and developing products and processes where chemical and physical changes occur. It includes designing chemical plants and control systems.

#### Subjects studied include:

**Chemical Reactors** 

Chemistry

**Engineering Materials** 

Fluid Mechanics

Heat and Mass Transfer

Mathematics

Particle Mechanics

**Physics** 

Plant and Equipment Design

Process Design, Control and Analysis

**Process Engineering** 

Separation Processes

Thermodynamics

#### Skills learnt include:

- applying mathematical principles of modelling and optimisation to the design of chemical processes
- applying the laws of physical chemistry and physics to chemical engineering operations
- designing and developing chemical processes and plants
- preparing feasibility studies and costings of processes

# Examples of qualifications include:

- 1 691 Master of Engineering in Chemical Engineering Master of Applied Science in Chemical Engineering
- 2 691 Graduate Diploma in Corrosion Technology Graduate Diploma in Biochemical Engineering
- 3 691 Bachelor of Engineering in Chemical
  Engineering
  Bachelor of Science in Chemical Engineering

# 692 Aeronautical Engineering Science

Aeronautical Engineering Science is the study of planning, designing, developing and producing aircraft structures and systems.

### Subjects studied include:

Science

Aerodynamics

Aeronautics

Aeronautical Engineering Drawing and Design

Aerospace Structures

**Applied Mechanics** 

**Dynamics** 

Flight Vehicle Systems

**Mathematics** 

**Physics** 

Propulsion

Statics

#### Skills learnt include:

- designing aircraft, aircraft components and support equipment
- evaluating test flights to analyse performance and compliance to specifications and safety standards
- authorising modifications, repairs and maintenance

# Examples of qualifications include:

1 692 Master of Engineering in Aerospace Engineering

3 692 Bachelor of Engineering in Aerospace

Engineering

Bachelor of Engineering in Aeronautical Engineering

# 693 Industrial Engineering Science

**Industrial Engineering Science** is the study of planning, designing, and developing safe and efficient production systems and working environments by integrating technological, financial, human and other resources.

# Subjects studied include:

**Mathematics** 

Computing

Engineering Drawing and Design

**Engineering Materials** 

Manufacturing Technology

Materials Handling

Metrology

Physics

**Product Engineering** 

Production Control

**Production Processes** 

Systems Engineering

#### Skills learnt include:

- selecting and developing manufacturing processes using new and existing machinery and equipment
- designing, developing, controlling and evaluating manufacturing systems
- operating and managing production systems and procedures

#### Examples of qualifications include:

1 693 Master of Engineering Science in Industrial Engineering

Master of Engineering in Computer Integrated Manufacture

2 693 Graduate Diploma in Robotics

3 693 Bachelor of Engineering in Manufacturing Engineering

Bachelor of Engineering in Production Engineering

5 693 Associate Diploma in Production Engineering Associate Diploma of Business in Industrial

Engineering

Associate Diploma in Computer Integrated Manufacturing

6 693 Certificate in Industrial Engineering

7 693 Certificate in Computer Integrated Manufacturing

ertificate in Materials Handli

Certificate in Materials Handling

# 694 Marine Engineering Science

Marine Engineering Science is the study of maintaining and operating shipboard machinery and systems.

# Subjects studied include:

**Applied Mechanics** 

Digital Electronic Technology

Engineering Drawing and Design

Fluid Mechanics

Instrumentation

Marine Control Systems

Marine Electrical Systems

Marine Safety

Marine Technology

**Mathematics** 

Ship Operation and Maintenance

Thermodynamics

# Skills learnt include:

- designing and developing marine engineering systems
- operating, maintaining and managing marine engineering systems
- inspecting machinery and equipment to ensure compliance with standards
- evaluating operational and maintenance procedures used for marine machinery and control equipment

# Examples of qualifications include:

3 694 Bachelor of Engineering in Maritime

Engineering

Bachelor of Applied Science in Marine Engineering

4 694 Diploma of Technology in Marine Engineering

5 694 Associate Diploma in Marine Engineering Associate Diploma in Maritime Electronics Advanced Certificate in Marine Engineering Watchkeeping

6 694 Marine Engineering Class 3

7 694 Certificate in Marine Engineering Watchkeeping

# 695 Other Engineering Science

Other Engineering Science is the study of all Engineering Sciences not elsewhere classified.

Examples of qualifications include:

1 695 Master of Engineering in Agricultural Engineering

Master of Biomedical Engineering

Master of Applied Science in Environmental Engineering

2 695 Graduate Diploma in Biomedical Engineering
Graduate Diploma in Environmental
Engineering
Graduate Diploma in Power Engineering

3 695 Bachelor of Engineering in Resource

Engineering

Bachelor of Engineering in Agricultural Engineering

Bachelor of Engineering in Naval Architecture

Bachelor of Engineering in Biomedical Engineering

5 695 Certificate in Naval Architecture Certificate of Technology in Ship Design Drafting

6 695 Certificate in Hospital Engineering

7 695 Certificate in Fire Engineering

#### 696 Marine Construction

Marine Construction is the study of fabricating, fitting out and repairing marine vessels and their structural components.

Subjects studied include:

**Aluminium Craft** 

Docking and Launching

Fibreglassing

Internal Structure and Steering Gear

Joinery

Laminating

Lofting, Decking and Planking

Marine Reinforced Plastics

Steam Bending

Steel Ship Construction

**Timber Boat Frames** 

**Timber Properties** 

# Skills learnt include:

- constructing, maintaining and repairing the internal structure, steering gear and hull support systems of marine craft
- interpreting drawings and specifications to prepare full-scale layouts
- shaping and installing masts, frames, decking and fittings
- preparing templates from full-sized detailed drawings

Examples of qualifications include:

6 696 Trade Certificate in Shipbuilding
Trade Certificate in Boat and Shipbuilding
Trade Certificate in Shipwrighting
Apprenticeship in Boat Building

7 696 Certificate in Boatyard Operations

# 697 Wood Machining and Turning

Wood Machining and Turning is the study of shaping wood using various machines. It includes the study of wood carving.

Subjects studied include:

Cutter Development

Designing and Making Templates and Jigs

Grinding and Sharpening

Joinery Machining

Machine and Tool Maintenance

Mortise and Tenon Machines

Routing

Sawing and Planing

Setting up Machines

Timber Technology

#### Skills learnt include:

- setting up, adjusting and caring for lathes, saws, planes and routers
- designing and making templates and jigs
- machining, sawing, planing, shaping and carving wood.

Examples of qualifications include:

5 697 Advanced Certificate in Woodmachining

6 697 Trade Certificate in Woodmachining
Trade Certificate in Woodturning
Apprenticeship in Woodturning

7 697 Pre-apprenticeship in Woodmachining

# 698 Cabinet Making

Cabinet Making is the study of constructing and repairing furniture and interior fittings for buildings.

Subjects studied include:

**Box Construction** 

Chairwork

Costing and Estimating

Drawer Work

Furniture Design and Construction

Hand and Power Tools

**Joining** 

Laminating

**Polishing** 

Upholstery

Writing Furniture

#### Skills learnt include:

- · repairing damaged furniture and cabinets
- constructing custom-built furniture, interior fittings and fixtures
- · selecting woods and preparing parts
- interpreting drawings and other specifications to determine job requirements

### Examples of qualifications include:

- 5 698 Advanced Certificate in Cabinetmaking
- 6 698 Trade Certificate in Cabinetmaking
  Trade Certificate in Chairmaking
  Apprenticeship in Chair and Couchmaking
- 7 698 Certificate in Cabinetmaking

# 699 Other Engineering, nec

Other Engineering, nec is the study of all Other Engineering not elsewhere classified in Narrow Field 69 Other Engineering.

- 1 699 Master of Design in Industrial Design
- 2 699 Graduate Diploma in Ergonomics
   Graduate Diploma in Quality Technology
   Graduate Diploma in Quality Management
- 3 699 Bachelor of Arts in Industrial Design Bachelor of Design in Industrial Design
- 4 699 Diploma in Art in Industrial Design
- 5 699 Associate Diploma in Glass Work
- 6 699 Apprenticeship in Holloware Polishing Trade Certificate in French Polishing
- 7 699 Certificate in Quality Control
  Certificate in Plastics Technology
  Certificate in Shotfiring
  Certificate in Timber Technology
  Certificate in Fibreglass Reinforced Plastics
  Certificate in Furniture Production

# Broad Field 7 Architecture and Building

**Architecture and Building** is the study of the art, science and techniques involved in designing, constructing, adapting and maintaining public, commercial, industrial and residential structures. It involves the study of the art and science of designing and adapting the surrounds of buildings and other external environments.

The theoretical content of Broad Field 7 Architecture and Building includes:

- · aesthetics and space dynamics
- design and drawing
- building science
- building economics
- · structural engineering
- · building techniques and technologies
- · construction management

The main purpose of this broad field of study is to provide an understanding of integrating structural and aesthetic elements to buildings, and construction methods, techniques and materials.

Fields of study in this broad field are classified into the following narrow fields:

- 71 Building Design
- 72 Building Construction
- 79 Other Architecture and Building

#### **Exclusions:**

Engineering is excluded from this broad field as it is sufficiently specialised to form a distinct and separate broad field, Broad Field 6 Engineering.

Naval Architecture is excluded from this broad field as it is more concerned with engineering considerations than aesthetics. It is included in Detailed Field 695 Other Engineering Science.

Urban and Regional Planning is excluded from this broad field as it is more concerned with the social impacts that the built environment has on society than aesthetic considerations. It is included in Detailed Field 499 Other Society and Culture, nec.

Gardening is excluded from this broad field as it is more concerned with the cultivation and maintenance of plants and gardens than designing and planning the built environment. It is included in Detailed Field 821 Horticulture.

## **Building Design**

**Building Design** is the study of the art and science of planning and designing public, commercial, industrial and residential buildings, and their interiors. It includes the study of planning and designing external environments.

The focus of courses in Building Design is the theories, methods and practice of designing buildings, interiors and landscapes with consideration of the materials used and the inter-relationship between humans and their built environment.

Courses of study aim to develop:

- an understanding of the structural, aesthetic, operational and environmental aspects of building design
- · an understanding of the properties of building materials and their uses
- · an understanding of building construction technology
- an understanding of the inter-relationship between humans and the built environment
- an understanding of project finance and economics, business and practice management, and related laws and regulations

Fields of study in this narrow field are classified into the following detailed fields:

- 711 Architecture
- 712 Interior Design
- 719 Building Design, nec

## 711 Architecture

Architecture is the study of the art, science and techniques of building design. It encompasses both utilitarian ends, such as the soundness of the structure, and the functional and economic efficiency of the building, and aesthetic considerations.

#### Subjects studied include:

Architectural Aesthetics

**Architectural Drafting** 

Architectural Theory and Design

**Building Construction** 

**Building Law and Regulations** 

**Building Project Management** 

**Built Form and Culture** 

**Ergonomics** 

History of Architecture

**Specifications Writing** 

#### Skills learnt include:

 analysing sites and making appropriate recommendations for development and construction

- preparing detailed scale drawings and specifications for design and construction
- liaising with clients and other professionals on matters of design, cost, timing and feasibility of projects
- monitoring construction to ensure compliance with specifications

#### Examples of qualifications include:

1711 Master of Architecture

Master of Architectural Design

2 711 Graduate Diploma of Design Science in Energy Conservative Design

3 711 Bachelor of Arts in Architecture

Bachelor of Architecture

4 711 Diploma of Architecture

5 711 Advanced Certificate in Architectural Drafting Associate Diploma of Applied Science in Architectural Drafting

Associate Diploma of Architectural Drafting

6711 Certificate in Architectural Drafting

7711 Certificate in Architectural Practice

## 712 Interior Design

**Interior Design** is the study of the planning, designing and furnishing interior environments with a concern for functionality, practicality, and human needs and requirements.

## Subjects studied include:

Colour Theory and Application
Design Theory
Drawing and Drafting
Fabrics, Textiles and Applied Finishes
Furniture Design
History of Design
Industrial Design
Lighting
Manufacturing Technology
Organisation of Space

#### Skills learnt include:

- formulating design concepts for building interiors
- preparing illustrations, sketches and models to communicate design concepts
- selecting and recommending decorative and functional materials for building interiors
- liaising with clients and others on matters of design, cost, timing and functionality of design concepts

#### Examples of qualifications include:

- 1712 Master of Design in Interior Design
- 2712 Graduate Diploma in Interior Design
- 3 712 Bachelor of Design in Human Environments
  Bachelor of Arts in Interior Design
  Bachelor of Applied Science in Interior Design
- 4 712 Diploma of Arts in Interior Design
- 5 712 Associate Diploma of Arts in Interior Design Advanced Certificate in Interior Decoration
- 6712 Certificate in Interior Design
- 7 712 Certificate in Interior Decoration Certificate in Illumination

## 719 Building Design, nec

**Building Design, nec** is the study of all Building Design not elsewhere classified in Narrow Field 71 Building Design.

#### Examples of qualifications include:

- 1 719 Master of Landscape Architecture

  Doctor of Philosophy in Design Communication
- 2719 Graduate Diploma in Landscape Architecture
- 3 719 Bachelor of Arts in Environmental Design Bachelor of Applied Science in Environmental Design
  - Bachelor of Applied Science in Landscape Architecture
  - Bachelor of Landscape Architecture
- 6719 Certificate in Landscape Design
- 7719 Certificate in Landscape Technology

## **Building Construction**

**Building Construction** is the study of the science, technology and techniques of assembling, erecting and maintaining public, commercial, industrial and residential structures and their fittings.

The focus of courses in Building Construction is building operations, processes, technologies and techniques.

Courses of study aim to develop:

- an understanding of the functional aspects of construction, planning, development and management of buildings
- · an understanding of safe working practices relating to building operations
- · an understanding of building law and regulations
- an understanding of the various technologies and technical skills required in the construction and fitting out of buildings
- the ability to examine and interpret building plans and specifications and to organise, cost and complete the tasks required in the construction and maintenance of buildings

Fields of study in this narrow field are classified into the following detailed fields:

- 721 Building Technology
- 722 Carpentry and Joinery
- 723 Bricklaving
- 724 Painting, Decorating and Signwriting
- 725 Plastering
- 726 Plumbing
- 727 Roof Fixing
- 728 Floor and Wall Tiling
- 729 Building Construction, nec

## 721 Building Technology

**Building Technology** is the study of the theories, techniques, planning and co-ordination processes required to assemble, construct and maintain structures.

#### Subjects studied include:

**Building Act and Regulations** 

**Building Models** 

Builder's Contracts and Scheduling

Builder's Plant and Equipment

Construction Technology and Materials

Drawing and Design

**Estimating** 

**Specification Writing** 

Structural Theory and Mechanics

The Historical Development of Building Forms

#### Skills learnt include:

 analysing architect's designs to prepare preliminary sketches and working drawings

- interpreting building plans, regulations and codes of practice
- preparing tenders, supporting contract bids and variations
- inspecting work and materials for compliance with specifications, regulations and standards
- co-ordinating works programmes for the various trades involved in building construction

#### Examples of qualifications include:

1 721 Master of Building

Master of Building Science

2 721 Graduate Diploma of Applied Science in Building

3 721 Bachelor of Building

Bachelor of Applied Science in Construction Management

Bachelor of Engineering in Building Engineering

4 721 Diploma of Building

5 721 Associate Diploma in Building Technology Associate Diploma of Applied Science in Building

Advanced Certificate in Building Technology

7 721 Certificate for Building Technicians

## 722 Carpentry and Joinery

Carpentry and Joinery is the study of fabricating, assembling, installing, renovating, and repairing doors, frames, formwork and other fittings in buildings.

#### Subjects studied include:

Floor Construction
Formwork, Framework and Trusses
Hip and Valley Roofing
Planing and Chiselling
Sealing Frames and Roofing
Stair Construction
Tool Maintenance
Wall Framing, Cladding and Lining
Window and Door Joinery
Window Installation
Wood and Other Materials

#### Skills learnt include:

- determining details of work from plans and specifications
- selecting appropriate timbers and materials
- cutting timber to size using hand or power tools
- assembling and installing timber fixtures and structures
- checking the accuracy of work using square rules and spirit levels

#### Examples of qualifications include:

6 722 Trade Certificate in Carpentry and Joinery Trade Certificate in Framework Carpentry

7 722 Pre-Apprenticeship in Carpentry and Joinery Certificate in Carpentry and Joinery

## 723 Bricklaying

Bricklaying is the study of laying and joining bricks, stone and building blocks to construct and repair all types of masonry structures, and equipment such as industrial ovens, furnaces, kilns and smelters.

## Subjects studied include:

Arch Construction
Bricklaying Techniques
Concrete and Brick Cleaning
Concrete Masonry
Damp Proofing

Fireplace and Chimney Construction Jointing and Pointing Mortar and Other Adhesives Refractory Brickwork Scaffolding

#### Skills learnt include:

- spreading mortar over bricks, blocks and stones using trowels, and removing excess mortar once in place
- shaping bricks to fit irregular spaces
- repairing and maintaining brick and related structures and equipment
- checking each row of bricks for vertical and horizontal alignment using plumb lines and string lines
- determining details of work from plans and specifications

#### Examples of qualifications include:

6 723 Trade Certificate in Bricklaying Trade Certificate in Tuckpointing

7 723 Pre-Apprenticeship in Bricklaying

#### **Exclusions:**

Brickpaving is excluded from this detailed field as it is more concerned with laying paving than the construction or repair of building structures. It is included in Detailed Field 729 Building Construction, nec.

Masonry and Stonemasonry are excluded from this detailed field as they are more concerned with cutting and shaping stone blocks than laying and joining them. They are included in Detailed Field 729 Building Construction, nec.

## 724 Painting, Decorating and Signwriting

Painting, Decorating and Signwriting is the study of applying paint, varnish, paper, vinyl and fabrics to decorate and protect interior and exterior surfaces. It includes the study of designing and painting signs.

#### Subjects studied include:

Design and Colour
Gilding
Lettering and Layout
Lining and Stencils
Paints and Wallpapers
Painting and Decorating Techniques
Scaffolding
Signwriting Techniques
Surface Preparation

#### Skills learnt include:

- · designing, marking out and painting signs
- applying papers, vinyls and fabrics to walls
- selecting and mixing paints and adhesives
- preparing surfaces by removing old paint and paper, cleaning and sanding
- determining the type and quantity of materials required
- determining details of work from proposals, sketches or written instructions
- painting walls and other surfaces using brushes, rollers and spray guns

## Examples of qualifications include:

- 5 724 Advanced Certificate in Painting, Decorating and Signwriting
- 6 724 Trade Certificate in Painting and Decorating Trade Certificate in Signwriting Trade Certificate in Graining and Marbling
- 7 724 Pre-Apprenticeship Certificate in Painting and Decorating
  Certificate in Signwriting
  Pre-Apprenticeship in Signwriting

## 725 Plastering

**Plastering** is the study of fixing fibrous sheets and applying plaster, cement-based and similar materials to ceilings, interior and exterior walls of public, commercial and domestic buildings. It includes the study of making plasterboard and plaster mouldings.

#### Subjects studied include:

Decorative Finishing
Fibrous Plasterwork
Rendering and Moulding
Scaffolding
Solid Plasterwork
Surface Preparation
Trowelling and Rough Casting

## Skills learnt include:

- mixing and applying plaster, and creating decorative textures in finishing coats
- cutting plasterboard and fixing it to walls and ceilings
- · smoothing joins, angles and fixing cornices
- manufacturing plasterboard and plaster mouldings

#### Examples of qualifications include:

6 725 Trade Certificate in Solid Plastering
Trade Certificate in Fibrous Plastering, Wall
and Ceiling Fixing
Apprenticeship in Fibrous Plastering

## 726 Plumbing

Plumbing is the study of designing, installing, maintaining and repairing pipelines, fixtures, fittings and related equipment for water, steam, gas, sewerage and other liquids in residential, public, commercial and industrial establishments.

#### Subjects studied include:

Drainage
Drawing and Design
Gasfitting
Irrigation Systems
Pipe-joint Techniques and Fittings
Plumbing Materials
Plumbing Regulations and Codes
Properties of Gases and Liquids
Roof Plumbing
Sprinkler Fitting
Waste Disposal

#### Skills learnt include:

- assembling, installing and connecting pipes to various components, equipment and appliances
- measuring, cutting, threading, bending and joining pipes
- testing and adjusting lines, control mechanisms and sewerage systems
- determining the layout of pipeline systems and materials required from drawings and specifications, and ensuring their compliance with relevant codes and regulations
- locating and marking positions for connections, fixtures, pipes and areas to be excavated

#### Examples of qualifications include:

- 5 726 Advanced Certificate in Plumbing
  Associate Diploma in Plumbing Services
- 6 726 Trade Certificate in Sprinkler Fitting
  Trade Certificate in Plumbing
  Certificate in Plumbing Services Design
  Apprenticeship in Plumbing and Gasfitting
- 7 726 Certificate in Draining
  Pre-Apprenticeship in Plumbing

## 727 Roof Fixing

**Roof Fixing** is the study of covering structures with roof tiles, shingles and other materials to form a waterproof surface.

#### Subjects studied include:

Concrete and Clay Fastening Materials Flashing and Gutters
Measuring and Cutting
Roofing Claddings
Roof Structure and Design
Scaffolding
Slate, Shingles and Metal Tiles

#### Skills learnt include:

- aligning and securing starter rows of roofing material, and laying successive overlapping layers
- sizing and cutting roofing materials to fit around vents, chimney edges, ridges and corners
- · fixing edge and ridge tiles in mortar and cement
- nailing or stapling roof underlays to roofs
- determining the layout of tiles and materials required from drawings and specifications

## Examples of qualifications include:

6 727 Apprenticeship in Roof Slating and Tiling Trade Certificate in Roof Tiling

## 728 Floor and Wall Tiling

Floor and Wall Tiling is the study of laying slate, stone, ceramic and other non-resilient tiles on external and internal walls and floors.

#### Subjects studied include:

Adhesive Fixing
Ceramics
Cleaning and Finishing
Curved Walls and Columns
Expansion Joints
Pools and Baths
Surface Preparation
Tile Cutting
Tiling Returns and Accessories
Vertical Mosaics

#### Skills learnt include:

- spreading adhesives onto surfaces, setting, positioning and aligning tiles using spirit levels, square rules, plumb lines and straight edges
- · cleaning tiles and removing excess grout
- preparing and cleaning surfaces by removing old tiles, grout and adhesives
- examining plans to determine patterning and layout of work
- cutting tiles to fit into corners and around fixtures

#### Examples of qualifications include:

6 728 Trade Certificate in Floor and Wall Tiling
Trade Certificate in Ceramic Floor and Wall
Tiling
Apprenticeship in Tile Laying

#### **Exclusions:**

Carpet, Cork, Linoleum and Vinyl Laying are excluded from this detailed field as they are sufficiently specialised to form a distinct and separate detailed field. They are included in Detailed Field 791 Floor Covering.

## 729 Building Construction, nec

**Building Construction, nec** is the study of all Building Construction not elsewhere classified in Narrow Field 72 Building Construction.

#### Examples of qualifications include:

- 3 729 Bachelor of Applied Science in Building Surveying
- 4 729 Diploma in Building Surveying
- 5 729 Associate Diploma of Applied Science in Building Inspection
   Associate Diploma of Applied Science in Building Surveying
- 6 729 Apprenticeship in Stonemasonry Certificate in Municipal Building Surveying
- 7 729 Certificate in Scaffolding Construction Certificate in Scaffolding Inspection Certificate in Scaffolding Certificate in Rigging

## Other Architecture and Building

Other Architecture and Building is the study of all Architecture and Building not included elsewhere in Broad Field 7 Architecture and Building.

Fields of study in this narrow field are classified into the following detailed fields:

791 Floor Covering

792 Glass Working

793 Quantity Surveying

799 Other Architecture and Building, nec

## 791 Floor Covering

**Floor Covering** is the study of measuring and installing carpet, linoleum, vinyl, cork tiles and other soft floor coverings.

#### Subjects studied include:

Adhesives

Carpet Underlays

Cutting, Shaping and Trimming

**Estimating and Costing** 

Parquetry and Timber Floor Surfacing

Skirting and Extrusions

Smoothedge Naplock

Staircase Techniques

**Sub-floor Preparation** 

Vinyl Welding and Covering

#### Skills learnt include:

- laying covering materials over floors
- cutting shapes around permanent obstructions, matching adjacent patterns and trimming edges
- fixing underlays of hardboard sheet, rubber or felt
- removing baseboard moulding trims to install edges of coverings
- measuring and marking off areas to determine layout

#### Examples of qualifications include:

6 791 Trade Certificate in Floor Covering

7 791 Certificate in Floorcovering

#### **Exclusions:**

Slate, Stone and Ceramic Tile Laying are excluded from this detailed field as they are sufficiently specialised to form a distinct and separate detailed field. They are included in Detailed Field 728 Floor and Wall Tiling.

## 792 Glass Working

Glass Working is the study of planning, producing, installing and maintaining glazing.

#### Subjects studied include:

Bevelling

**Estimating and Costing** 

Glass Joining Techniques

**Glazing Techniques** 

Grinding

Measuring, Fitting and Installing Glass Panes and

**Mirrors** 

Safety

Sandblasting

Scoring and Cutting Glass

Sealants

Template Design

#### Skills learnt include:

- · fitting and installing glass panes and mirrors
- · assembling pre-fabricated glass units
- scoring glass surfaces using glass cutting tools
- breaking glass along scored lines using notched tools or glass pliers

#### Examples of qualifications include:

6 792 Trade Certificate in Flat Glass

Trade Certificate in Glazing

Trade Certificate in Glass and Glazing

## 793 Quantity Surveying

**Quantity Surveying** is the study of estimating quantities of materials and total costs involved in building and construction.

#### Subjects studied include:

Building Acts and Regulations
Building Economics
Building Materials
Construction Design and Technology
Cost Control
Costing and Estimation
Quantity Surveying Measurement and Methods
Quantity Surveying Mathematics
Specification Writing
Valuations and Delapidations

#### Skills learnt include:

- analysing architectural and engineering drawings, specifications and tenders in order to estimate costs at the planning stage of the building process
- preparing bills of quantities, describing the materials, items of work and the quantities required
- advising on costs of alternative construction materials and methods, and on alternative contractual arrangements
- · liaising with architects, builders and engineers
- · valuing complex structures and buildings

#### Examples of qualifications include:

- 1 793 Master of Applied Science in Quantity Surveying Master of Building in Quantity Surveying
- 3 793 Bachelor of Applied Science in Quantity Surveying Bachelor of Construction Economics
- 4 793 Diploma of Quantity Surveying
- 5 793 Associate Diploma of Applied Science in
- Construction Estimating
  7 793 Certificate in Construction Estimating

## 799 Other Architecture and Building, nec

Other Architecture and Building, nec is the study of all Other Architecture and Building not elsewhere classified in Narrow Field 79 Other Architecture and Building.

# Broad Field 8 Agriculture and Related Fields

**Agriculture and Related Fields** is the study of the theory and practice of growing, gathering, reproducing and caring for plants and animals. It includes the study of producing primary plant and animal products.

The theoretical content of Broad Field 8 Agriculture and Related Fields includes:

- · animal production and management
- biological science
- agronomy
- silviculture
- management, marketing and distribution

The main purpose of this broad field of study is to develop an understanding of the management of farms, gardens, nurseries, turf playing surfaces, forests, fisheries and zoos, and the production of primary agricultural products.

Fields of study in this broad field are classified into the following narrow fields:

- 81 Agriculture
- 82 Horticulture
- 89 Other Agriculture and Related Fields

#### **Exclusions:**

Veterinary Studies is excluded from this broad field as it is more concerned with the prevention, diagnosis, care and treatment of diseases, ailments and injuries in animals than agriculture. It is included in Narrow Field 25 Veterinary Studies.

## Agriculture

Agriculture is the study of growing, maintaining and harvesting non-intensively managed crops and pastures, and grazing and managing animals. It includes the study of managing farms and producing unprocessed plant and animal products.

The focus of courses in Agriculture is farming technology and management, livestock, non-intensively managed crops and pastures and unprocessed plant and animal products.

Courses of study in Agriculture aim to develop:

- an understanding of animal genetics and reproductive techniques
- an understanding of the production and marketing of plant and animal products
- an understanding of health, disease and nutrition of animals
- an understanding of crop production agricultural systems
- an understanding of the theory and practice of farming and farm management
- the ability to utilise current agricultural technology, techniques and practices

Fields of study in this narrow field are classified into the following detailed fields:

- 811 Agricultural Science
- 812 Wool Science
- 813 Animal Husbandry
- 819 Agriculture, nec

#### **Exclusions:**

Fisheries and Forestry are excluded from this narrow field as they are sufficiently specialised to form distinct and separate detailed fields, Detailed Fields 891 Fisheries and 892 Forestry respectively.

Horticulture is excluded from this narrow field as it is sufficiently specialised to form a distinct and separate narrow field, Narrow Field 82 Horticulture.

#### 811 **Agricultural Science**

Agricultural Science is the study of the non-intensive farming of animals and plants.

Subjects studied include:

Agricultural Marketing

Cropping and Grazing Systems

**Dairying** 

**Dryland Farming Systems** 

**Ecology** 

Farm Business Management

Irrigation

Machinery Maintenance

Pest Management Systems

Soil Conservation

Soils and Climate

#### Skills learnt include:

- recognising key factors influencing production and profitability in running a farm business
- developing practical and technical farming
- analysing current and future market conditions to determine which crops are grown and/or livestock raised
- operating and maintaining farm machinery and equipment

#### Examples of qualifications include:

- 1 811 Master of Applied Science in Agriculture Master of Agricultural Science
- 2 811 Graduate Diploma of Agricultural Studies in Plant Pathology
   Graduate Diploma of Science in Tropical

Agriculture

Agriculture

- 3 811 Bachelor of Science in Rural Management Bachelor of Science in Agronomy Bachelor of Rural Science
- 4 811 Diploma of Science in Agriculture
  Diploma in Applied Farm Management
- 5 811 Advanced Certificate in Farming
  Associate Diploma in Farm Management
  Associate Diploma of Applied Science in
  Systems Agriculture

Associate Diploma in Farm Production

- 6 811 Trade Certificate in Farming
  Trade Certificate in Dairy Farming
- 7 811 Certificate in Agriculture
  Certificate in Farming
  Certificate in Agricultural Production

#### **Exclusions:**

Wool Science and Animal Husbandry are excluded from this detailed field as they are sufficiently specialised to form distinct and separate detailed fields, Detailed Fields 812 Wool Science and 813 Animal Husbandry respectively.

#### 812 Wool Science

Wool Science is the study of producing, handling and classing wool.

## Subjects studied include:

Characteristics of Wool
Fibre Growth
Fibre Strength and Measurement
Fleece Standards and Preparation
Scouring and Carbonising
Breeds of Sheep
Wool Classing

#### Skills learnt include:

- analysing wool fibre structure
- · identifying, classing and handling wool
- managing shearing shed operations
- storing and maintaining wool stocks

## Examples of qualifications include:

5 812 Advanced Certificate in Shearing Shed Management

Advanced Certificate in Sheep and Wool Technology

Certificate of Technology in Wool Handling and Production

7 812 Certificate in Woolclassing
Certificate in Basic Wool Preparation

## 813 Animal Husbandry

**Animal Husbandry** is the study of the intensive management of animals. It includes their handling, care, breeding and rearing.

#### Subjects studied include:

Animal Anatomy and Physiology
Animal Behaviour
Animal Genetics and Breeding
Animal Handling and Care
Animal Health and Disease
Animal Housing and Hygiene
Animal Legislation, Ethics and Welfare
Animal Nutrition
Apiary Management

Horse Breaking and Training

Stud and Stable Administration and Management

#### Skills learnt include:

- applying artificial breeding techniques and genetics to the improvement of animal production
- · supervising animal breeding programmes
- identifying environmental factors affecting flock and herd health and productivity
- providing for the day to day needs of animals including hygiene and nutrition

#### Examples of qualifications include:

- 1813 Master of Rural Science in Animal Nutrition
- 2 813 Post-graduate Diploma of Applied Science in Animal Husbandry
- 3 813 Bachelor of Applied Science in Equine Studies Bachelor of Applied Science in Animal Husbandry
- 4 813 Diploma in Animal Husbandry
- 5 813 Associate Diploma in Animal Technology Associate Diploma in Animal Husbandry Associate Diploma in Applied Science in Apiculture
- 6813 Trade Certificate in Poultry
- 7 813 Certificate in Animal Husbandry Certificate in Domestic Animal Care Certificate in Zookeeping

#### **Exclusions:**

Fisheries is excluded from this detailed field as it is sufficiently specialised to form a distinct and separate detailed field, Detailed Field 891 Fisheries.

Jockeying is excluded from this detailed field as it is more concerned with riding horses than breeding or rearing them. It is included in Detailed Field 999 Other Miscellaneous Fields, nec.

## 819 Agriculture, nec

Agriculture, nec includes the study of all Agriculture not elsewhere classified in Narrow Field 81 Agriculture.

Examples of qualifications include:

- 3 819 Bachelor of Applied Science in Plant Protection
- 5 819 Advanced Certificate in Irrigation
  Associate Diploma of Applied Science in
  Agricultural Protection
  Associate Diploma of Plant Protection
- 7 819 Certificate in Pest Control
  Certificate in Weed Control
  Certificate in Agricultural Protection

## Horticulture

Horticulture is the study of cultivating, propagating and producing intensively managed crops such as fruits, vegetables, flowers, foliage, nursery crops, trees, shrubs and plants. It includes the study of greenkeeping, and establishing and maintaining parks and gardens.

The focus of courses in Horticulture is intensively managed crops, horticultural technology and management, and parks, greens and gardens.

Courses of study in Horticulture aim to develop:

- an understanding of the factors affecting plant propagation, growth and physiology
- an understanding of soil science
- an understanding of plant diseases, pests and weed control
- the ability to utilise current horticultural technology, techniques and practices

Fields of study in this narrow field are classified into the following detailed fields:

821 Horticulture

#### 821 Horticulture

Horticulture is the study of cultivating, propagating and producing intensively managed crops such as fruits, vegetables, flowers, foliage, nursery crops, trees, shrubs and plants. It includes the study of greenkeeping, and establishing and maintaining parks and gardens.

#### Subjects studied include:

Arboriculture

Floriculture

Greenhouse Technology and Management

Harvesting, Storage and Marketing

Horticultural Engineering

Landscape Management

**Ornamental Plants** 

Plant Physiology

Plant Protection

Soil Management

Viticulture

#### Skills learnt include:

- identifying pests, diseases and nutritional disorders in plants
- designing, establishing and maintaining turf for various sport and recreational facilities

- planting, pruning and maintaining shrubs and
- propagating, cultivating and harvesting intensively managed crops

#### Examples of qualifications include:

- Master of Science in Horticulture 1821
- 2821 Graduate Diploma in Horticultural Science
- 3 821 Bachelor of Business in Horticulture
- 4 821 Diploma in Horticulture
- Advanced Certificate in Arboriculture 5 821

Associate Diploma of Applied Science in Landscape

Associate Diploma of Applied Science in Viticulture

Associate Diploma of Applied Science in Amenity Horticulture

Associate Diploma of Applied Science in

Horticultural Nursery Management 6 821 Apprenticeship in Vegetable Growing

Trade Certificate in Greenkeeping

Trade Certificate in Horticulture

Trade Certificate in Turf Management

7 821 Certificate in Horticulture

Certificate in Recreational Turf Management

Certificate in Tree Surgery

Certificate in Arboriculture

Certificate in Turf Cultivation

## **Exclusions:**

National Park Management is excluded from this detailed field as it is more concerned with the relationship between organisms and their natural environment than cultivating or propagating intensively managed crops. It is included in Detailed Field 512 Environmental Science.

Wine Science is excluded from this detailed field as it is more concerned with the physical and chemical properties of wine and its production than cultivating or propagating intensively managed crops. It is included in Detailed Field 591 Food Science.

#### **Inclusions:**

The laying out and construction of urban and domestic parks and gardens is included in this detailed field as it includes the study of cultivating, propagating and producing intensely managed crops.

## Other Agriculture and Related Fields

Other Agriculture and Related Fields is the study of all Agriculture and Related Fields not included elsewhere in Broad Field 8 Agriculture and Related Fields.

Fields of study in this narrow field are classified into the following detailed fields:

891 Fisheries

892 Forestry

#### 891 Fisheries

**Fisheries** is the study of breeding, rearing, harvesting, handling and processing fish and other edible aquatic resources.

#### Subjects studied include:

Algology

**Aquatic Biology** 

Aquatic Technology

**Artificial Propagation** 

Fisheries Policy and Legislation

Microbial Diseases in Aquaculture

Seafood Handling and Processing

Water Quality

## Skills learnt included:

- recognising, preventing and controlling diseases associated with farming aquatic resources
- harvesting, handling and processing fish and other edible aquatic resources
- monitoring and maintaining water quality

#### Examples of qualifications include:

- 1 891 Master of Applied Science in Aquaculture Master of Applied Science in Fisheries
- 2 891 Graduate Diploma in Aquaculture Graduate Diploma in Fisheries
- 3 891 Bachelor of Applied Science in Fisheries Bachelor of Applied Science in Fisheries Technology

Bachelor of Applied Science in Aquaculture

- 4 891 Diploma of Applied Science in Aquaculture
- 5 891 Advanced Certificate in Fishing Operations Associate Diploma of Applied Science in Aquaculture

Certificate of Technology in Fisheries Operation

7 891 Certificate in Fishing Operations

#### **Exclusions:**

The operation of fishing vessels is excluded from this detailed field as it is more concerned with the operation of marine craft than farming fish. It is included in Detailed Field 931 Ship Operation.

## 892 Forestry

**Forestry** is the study of establishing, cultivating, harvesting and managing forests.

## Subjects studied include:

Dendrology

Forest Botany and Ecology

Forest Economics

Forest Harvesting

Forest Inventory and Measurement

Forest Management

Forest Pathology

Forest Protection

Silviculture

Tree Breeding and Genetics

Wood Anatomy and Properties

Wood Conversion and Utilisation

#### Skills learnt include:

- designing coupes and planning broadscale harvesting operations
- identifying, classifying and measuring trees and forests
- managing post-harvest rehabilitation programmes
- assessing current forest resources and estimating future demand

## Examples of qualifications include:

- 1 892 Master of Forestry Master of Forest Science
- 2 892 Graduate Diploma of Science in Forestry Post-graduate Diploma in Forest Science
- 3 892 Bachelor of Forest Science Bachelor of Science in Forestry
- 5 892 Associate Diploma of Applied Science in Forestry
- 7 892 Certificate in Forest Technology

#### **Exclusions:**

Timber Technology is excluded from this detailed field as it is more concerned with the production of milled and finished timber than cultivating and managing forests. It is included in Detailed Field 699 Other Engineering.

# Broad Field 9 Miscellaneous Fields

Miscellaneous Fields is the study of all fields not elsewhere classified.

Fields of study in this broad field are classified into the following narrow fields:

- 91 Hairdressing and Beauty Therapy
- 92 Food and Hospitality Services
- 93 Transport
- 99 Other Miscellaneous Fields

## Hairdressing and Beauty Therapy

Hairdressing and Beauty Therapy is the study of caring for the hair and body for grooming and beautification.

The focus of courses in Hairdressing and Beauty Therapy is scalp, facial and body hair, the skin, beautification and beauty treatments, and body beautification techniques.

Courses of study in Hairdressing and Beauty Therapy aim to develop:

- · an understanding of hair cutting, styling, colouring and treatment techniques
- an understanding of the techniques involved in maintaining and beautifying the body such as manicures, pedicures, hair removal, facial massages, ear piercing and eyebrow shaping and tinting
- an understanding of the techniques used in the application and use of skin care and cosmetic products
- an ability to advise clients on beauty treatments, hairstyles, exercise programmes, nutrition and general beauty care

Fields of study in this narrow field are classified into the following detailed fields:

911 Hairdressing

912 Beauty Therapy

#### **Exclusions:**

Cosmetic Surgery is excluded from this narrow field as it is more concerned with surgical techniques than beauty therapy. It is included in Detailed Field 212 Surgery.

## 911 Hairdressing

**Hairdressing** is the study of cutting, colouring and styling scalp and facial hair.

#### Subjects studied include:

Blow Waving and Tong Curling Chemical Reformation

Hair and Scalp Care

Hair Colouring and Bleaching

Hair Cutting and Styling

Hair Design

Permanent Waving

Salon Management

Scalp and Hair Cleaning and Treatment

Scalp Massage

Shaving and Beard Trimming

#### Skills learnt include:

- cutting hair using scissors, razors and electric clippers
- washing, tinting, streaking, permanent waving hair and applying conditioners and other treatments
- styling and straightening hair using brushes, combs, rollers, clips, curling irons and blow dryers
- analysing and advising customers on hair styles and treatments

#### Examples of qualifications include:

6 911 Trade Certificate in Hairdressing
Apprenticeship in Hairdressing
Trade Certificate in Men's Hairdressing

7 911 Certificate in Hairdressing
Pre-Apprenticeship in Hairdressing

## 912 Beauty Therapy

**Beauty Therapy** is the study of maintaining and beautifying the body.

## Subjects studied include:

Anatomy and Physiology
Body, Face and Hand Massage
Body and Facial Hair Removal
Cosmetics
Ear Piercing
Facial and Eyebrow Treatments
Fitness and Weight Control
Make-up and Ear Piercing
Manicure and Pedicure
Nutrition and Diet
Skin Treatments

#### Skills learnt include:

- applying make-ups, creams and lotions, and giving facial massages
- tinting, bleaching and removing facial and body hairs
- cutting, filing, sculpting, painting and polishing finger and toe nails
- using appliances and cosmetic masks to treat the skin and body
- analysing and advising clients on treatments, exercise programmes, nutrition and general beauty care

## Examples of qualifications include:

5 912 Associate Diploma of Applied Science in Beauty Therapy Associate Diploma of Health Science in Beauty Therapy

6 912 Trade Certificate in Beauty Therapy

7 912 Certificate in Cosmetology

## Food and Hospitality Services

**Food and Hospitality Services** is the study of processing and packaging meat, preparing, displaying and serving food and beverages, and providing hospitality services.

The focus of courses in Food and Hospitality Services is the preparation of food and beverages, and the hospitality industry.

Courses of study in Food and Hospitality Services aim to develop:

- an understanding of occupational safety and hygienic work practices in relation to the food and hospitality industry
- an understanding of the techniques of preparing, displaying and serving food including meat and pastry
- an understanding of the provision of hospitality services such as customer relations, food and beverage service, housekeeping, stock control and costing, and front office management
- · the ability to prepare food and beverages as required by customers

Fields of study in this narrow field are classified into the following detailed fields:

- 921 Meat Processing
- 922 Baking and Pastrycooking
- 923 Cooking
- 924 Hospitality Services
- 925 Waiting and Bar Service
- 929 Food and Hospitality Services, nec

#### **Exclusions:**

Food Science is excluded from this narrow field as it is more concerned with the chemical composition, handling and quality control of foods than food and hospitality. It is included in Narrow Field 591 Food Science.

#### 921 Meat Processing

**Meat Processing** is the study of processing and manufacturing meat.

#### Subjects studied include:

Abattoir Practices and Management
Anatomy of Meat Animals
Carcass Breakup and Boning
Equipment, Utensils and Handtools
Manufacture of Pet Food
Manufacture of Smallgoods
Meat Preparation and Cutting
Personal and Shop Hygiene
Related Statutes and Regulations
Seasonings, Additives and Preservatives
Storage and Handling of Meat

#### Skills learnt include:

- slaughtering livestock in abattoirs
- cutting and sawing carcasses into manageable proportions
- cutting and trimming standard cuts of meat and removing bones using hand tools and power equipment
- · seasoning, pickling and curing meats
- shaping and tying roasts and poultry
- operating meat cubing machines, mincers, grinders, mixers, patty-forming and sausage-forming machinery

Examples of qualifications include:

5 921 Advanced Certificate in Meat

6 921 Trade Certificate in Meat
Trade Certificate in Butchery
Apprenticeship in Butchery
Trade Certificate in Smallgoods Making

7 921 Pre-apprenticeship in Butchery

#### **Exclusions:**

Meat Inspection and Meat Purveying are excluded from this detailed field as they are more concerned with quality assessing and procuring meat than processing or manufacturing. They are included in Detailed Field 591 Food Science.

## 922 Baking and Pastrycooking

**Baking and Pastrycooking** is the study of making, displaying and presenting breads, pastries, buns and cakes.

#### Subjects studied include:

Boardworking and Baking
Bread and Roll Making
Cake Finishing, Modelling and Decoration
Cakes and Pastry Goods
Continental Pastry Making
Dough Moulding Techniques
Food Science and Nutrition
Speciality and Fancy Breads
Yeast Products

#### Skills learnt include:

- mixing, kneading, cutting, moulding and shaping dough by hand
- operating dough rolling, moulding and biscuit cutting machines
- monitoring baking times, temperatures and the appearance of products
- weighing and mixing ingredients
- co-ordinating the loading and unloading of ovens
- adjusting moulding dies, cutters or rollers on machinery
- maintaining cleanliness and operation of production equipment

#### Examples of qualifications include:

5 922 Advanced Certificate in Baking

6 922 Trade Certificate in Baking
Trade Certificate in Pastrycooking
Trade Certificate in Bakery and Pastry
Trade Certificate in Pastrymaking

Apprenticeship in Breadmaking and Baking

Apprenticeship in Baking
7 922 Certificate in Cake Decorating

Pre-apprenticeship Certificate in Pastrycooking

## 923 Cooking

Cooking is the study of preparing and presenting food, and maintaining and managing kitchens.

#### Subjects studied include:

A la Carte Cooking

Catering

Cookery

**Dining Room Presentation** 

Food Display and Presentation

**Food Science** 

Kitchen Management

Menu Planning

Nutrition and Hygiene

**Quantity Food Production** 

Sauce-making

Special Diets

#### Skills learnt include:

- preparing and cooking meats, fish, vegetables and other foods using a variety of methods
- seasoning foods during cooking as required
- portioning foods, adding sauces, gravies and garnishes in an attractive manner
- planning menus on the basis of available ingredients, preferred styles and customers' tastes
- examining and maintaining foodstuffs to ensure quality and freshness
- requisitioning food, kitchen supplies and equipment

#### Examples of qualifications include:

- 5 923 Associate Diploma of Applied Science in Food Promotion
- 6 923 Trade Certificate in Cooking
  Apprenticeship in Cooking
  Trade Certificate in Commercial Cookery
- 7 923 Certificate in Catering
  Certificate in Cookery
  Certificate in Commercial Cookery
  Certificate in Food Promotion
  Pre-vocational Certificate in Cookery

## 924 Hospitality Services

Hospitality Services is the study of providing reception, accommodation, entertainment, food, beverages and related services to patrons at hotels, clubs, restaurants, etc.

#### Subjects studied include:

Commodities and Purchasing Facilities Design Food and Beverage Service Hospitality Costing and Control Hospitality Laws and Regulations Hygiene and Storage Kitchen Operations Personnel Management Reception Tourism and Customer Relations

#### Skills learnt include:

- communicating with customers and servicing their needs
- organising and supervising food and beverage services
- organising and supervising housekeeping services
- planning and organising front office management
- planning, organising and catering for special functions
- · stock control and costing

## Examples of qualifications include:

7 924 Traineeship Certificate in Hospitality
Certificate in Catering Operations
Certificate in Hospitality Practice
Pre-vocational Certificate in Hospitality

#### **Exclusions:**

Hospitality Management is excluded from this detailed field as it is more concerned with the management of hospitality organisations than the provision of day to day services to patrons. It is included in Detailed Field 114 Hospitality Management.

## 925 Waiting and Bar Service

Waiting and Bar Service is the study of serving and presenting food and beverages in hotels, bars, restaurants, etc.

#### Subjects studied include:

Banqueting and Functions
Bar and Cellar Operations
Cocktails and Mixers
Customer Relations
Food and Beverage Service
Food Display and Presentation
Hygiene
Liquor Service
Silver Service Waiting
Waiting
Wines and Spirits

#### Skills learnt include:

- taking and serving meal orders
- mixing, preparing and serving drinks to customers' requirements
- setting tables with clean linen, cutlery and glassware
- communicating with customers and servicing their needs

#### Examples of qualifications include:

6 925 Apprenticeship in Waiting
Trade Certificate in Waiting

7 925 Certificate in Restaurant Services
Pre-apprenticeship Certificate in Waiting
Certificate in Food and Beverage Waiting

## 929 Food and Hospitality Services, nec

Food and Hospitality Services, nec is the study of all Food and Hospitality Services not elsewhere classified in Narrow Field 92 Food and Hospitality Services.

## **Transport**

**Transport** is the study of operating, navigating and directing ships, aircraft and other forms of transportation.

The focus of qualifications in Transport is the operation, direction and control of air, land and sea transport.

Courses of study in Transport aim to develop:

- · an understanding of the principles and practice of safe navigation
- · an understanding of meteorology as applied to transport operations
- · an understanding of the operation of communications equipment
- · an understanding of safety and emergency procedures
- the ability to direct and control air, land and sea transport
- · the ability to operate air, land and sea transport in all weather conditions

Fields of study in this narrow field are classified into the following detailed fields:

- 931 Ship Operation
- 932 Aircraft Operation
- 933 Air Traffic Control
- 939 Transport, nec

## 931 Ship Operation

Ship Operation is the study of operating and navigating ships, and their communication systems.

#### Subjects studied include:

**Bridge Equipment** 

Cargo Handling and Stowage

Coastal and Offshore Navigation

Maritime Laws and Regulations

Meteorology and Oceanography

**Navigation Safety** 

Port and Terminal Operations

Radar and Communications Equipment

Safety at Sea

Watchkeeping

#### Skills learnt include:

- directing the movement of vessels and the stowage and discharge of cargoes
- determining the vessel's position using electronic and non-electronic navigational aids
- directing and supervising ships' officers and deck crew in the performance of their duties

- communicating with ships and shore stations using radio or semaphore
- maintaining ships' equipment, cargo gear, rigging, life-saving and fire-fighting equipment
- keeping watch at sea and in port to ensure safety
- recording vessels' progress, crew's activities, weather and sea conditions

#### Examples of qualifications include:

- 3 931 Bachelor of Applied Science in Nautical Studies
- 4 931 Diploma of Applied Science in Nautical Science
- 5 931 Associate Diploma in Marine Radio

Communications

Marine Master Class 1

Marine Master Class 2

6 931 Marine Master Class 3

7 931 Certificate in Mariner Studies

Yachtmasters Certificate of Competency

Marine Master Class 4

Marine Master Class 5

## 932 Aircraft Operation

Aircraft Operation is the study of operating and navigating aircraft.

#### Subjects studied include:

Aerodynamics
Aircraft Performance and Load Control
Airframes, Piston Engines and Systems
Air Navigation and Flight Planning
Airways Operations and Procedures
Flight Rules and Radio Procedures
Instrument Rating
Meteorology
Principles of Flight
Rotary Winged Aircraft

#### Skills learnt include:

- flying aircraft in accordance with established air traffic control and aircraft operating procedures
- controlling aircraft on the ground and during take-offs and landings
- determining aircraft's position using electronic and non-electronic navigational aids
- reading and interpreting weather reports and conditions
- monitoring information from instruments and other sources to maintain course and flight
- maintaining aircraft safety by monitoring equipment and controls
- preparing and submitting flight plans, and examining standard flight plans

## Examples of qualifications include:

3 932 Bachelor of Science in Aviation

4 932 Diploma in Aviation Science

5 932 Associate Diploma of Applied Science in Civil Aviation

Commercial Pilot Licence

7 932 Certificate in Aviation

#### 933 Air Traffic Control

Air Traffic Control is the study of directing air traffic in controlled airspaces.

#### Subjects studied include:

Aeronautical Principles
Aircraft Recognition
Air Legislation
Air Navigation
Air Traffic Services
Approach and Tower Control
Flight Information Services
Meteorology
Principles of Flight
Radio, Radar and Navaids

#### Skills learnt include:

- directing aircraft movements in airspaces and on the ground using radar, radio and lighting systems
- informing flight crews and operations staff about weather conditions, operational facilities, flight plans and air traffic
- plotting and directing aircraft positions in flight using electronic navigational aids
- · recording details of flights and operations
- initiating and organising emergency, search and rescue services and procedures

#### Examples of qualifications include:

4 933 Diploma of Applied Science in Air Traffic Services

## 939 Transport, nec

**Transport, nec** is the study of all Transport not elsewhere classified in Narrow Field 93 Transport.

## Other Miscellaneous Fields

Other Miscellaneous Fields is the study of all Miscellaneous Fields not included elsewhere in Broad Field 9 Miscellaneous Fields.

Fields of study in this narrow field are classified into the following detailed fields:

991 Plant and Machine Operation

992 Fire Technology

999 Other Miscellaneous Fields, nec

## 991 Plant and Machine Operation

**Plant and Machine Operation** is the study of setting up, controlling and monitoring equipment either directly or by remote control.

Subjects studied include:

Bends and Hitches

Fibre Ropes

Loading

Maintenance

Natural Cordage

Plant Materials and Equipment

Safety and Accident Procedures

Sheave Blocks

Slinging

Splicing

#### Skills learnt include:

- setting-up, controlling and monitoring the operation of equipment to ensure its safe and efficient functioning
- · fitting attachments to equipment
- cleaning, lubricating and maintaining equipment
- · repairing minor defects in equipment

## Examples of qualifications include:

7 991 Certificate in Crane Operation (Dogman)
Certificate in Earth Moving Plant Operation
Certificate in Boiler Attending

## 992 Fire Technology

**Fire Technology** is the study of fire, fire fighting equipment and techniques, fire detection, suppression and prevention.

Subjects studied include:

**Bush Fires** 

**Exit Systems** 

Fire Appliances and Equipment

Fire Behaviour

Fire Detection

Fire Laws and Regulations

Fire Safety Management

Fire Science

Fire Service Operations

Fire Structure

Fire Surveying and Reports

Fire Tests

Smoke Control

Special Fire Hazards

#### Skills learnt include:

- spraying water, foam and chemicals to extinguish fires, and disperse and neutralise dangerous substances
- rescuing people from dangerous and inaccessible places using ladders and elevating platforms
- · administering first aid and artificial respiration
- driving and operating fire appliances
- investigating fire hazards and subsequently co-ordinating fire prevention action
- co-ordinating training of volunteers and instructing in fire prevention, fire-fighting, rescue and use of breathing apparatus
- developing fire-fighting and rescue techniques to combat specific hazards

Examples of qualifications include:

 5 992 Associate Diploma of Applied Science in Fire Technology
 Advanced Certificate in Fire Technology
 Certificate of Technology in Fire Technology

7 992 Certificate in Fire Technology Fire Officer's Certificate

## 999 Other Miscellaneous Fields, nec

Other Miscellaneous Fields, nec is the study of all Other Miscellaneous Fields not elsewhere classified in Narrow Field 99 Other Miscellaneous Fields.

Examples of qualifications include:

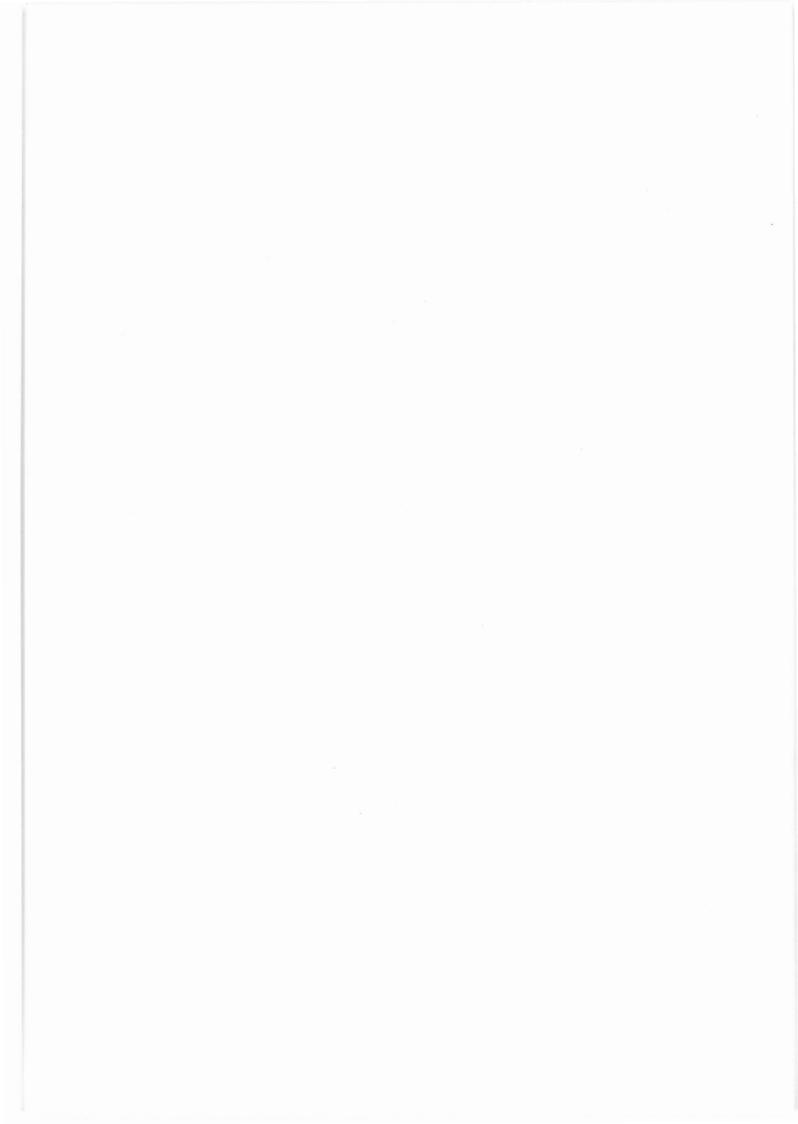
5 999 Associate Diploma in Security Management

7 999 Certificate in Mortuary Practices
Certificate in Jockey Studies
Traineeship Certificate in Furniture Removal

# **ABSCQ**

PART 5

**APPENDIXES** 



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## **ABSCQ**

## **APPENDIX 1**

LINK BETWEEN THE ABSCQ AND THE FIELD OF STUDY CLASSIFICATION OF TERTIARY EDUCATION COURSES (FOSCTEC)

ABSCQ		FOSCTEC			
_	Code		Title	Code	Tüle
1			BUSINESS AND ADMINISTRATION	04 04.01 04.01.01	BUSINESS, ADMINISTRATION, ECONOMICS Business, Administration, Economics – General Business, Administration, Economics – General
	11		Management	<b>04.02</b> 04.02.01	Business, Administration, Management Business, Administration, Management – General
		111	Business Management	04.02.03 04.02.16 11.03.01 11.03.03	Administration, General Management and Supervision Small Business Management Transportation – General Transportation/material Storage Services
		112	Public and Institution Management	04.02.10 05.04.02 07.03.02 08.03.02 08.03.03	Public Administration Educational Administration Health and Health Care Administration Justice Administration Law Enforcement
		113	Personnel Management	04.02.09	Personnel Management Development
		114	Hospitality Management	11.02.01 11.02.05	Food/ beverage, Hospitality, Tourism – General Hotel, Hospitality, Tourism
		119	Management, nec	01.04.02 04.02.08 04.02.99	Rural Management Marketing, Distribution, Import/ export Business, Administration, Management – Other
	12		Management Support Services	-	-
		121	Office Management	04.02.11 07.03.02	Secretarial, Word-processing, Clerical Health and Health Care Administration
		122	Keyboarding and Shorthand	04.02.05 04.02.11 08.04.01	Business/ administration Data Processing Secretarial, Word-processing, Clerical Legal Studies – General
		129	Management Support Services, nec	04.02.11	Secretarial, Word-processing, Clerical
	13		Sales and Marketing	_	_
		131	Wholesale and Retail Sales	01.05 01.05.01 04.02.08 11.04 11.04.01 11.04.02 11.04.03 11.04.99 11.05.03	Agricultural/ Land/ Rural Services And Supplies Agricultural/ Land/ Rural Services and Supplies – General Marketing, Distribution, Import/ export Apparel Sales, Services Apparel Sales, Services – General Clothing, Clothing Materials Footwear, Leatherwork Apparel Sales, Services – Other Home Furnishings
		132	Marketing	04.02.08	Marketing, Distribution, Import/ export
		133	Real Estate	04.02.12	Valuation and Real Estate
		134	Tourism	<b>11.02</b> 11.02.05	Food/ Beverage, Hospitality, Tourism Hotel, Hospitality, Tourism
		139	Sales and Marketing, nec	04.02.08 04.02.14	Marketing, Distribution, Import/export Advertising, Public Relations
	14		Financial Services	-	-
		141	Accounting	04.02.02	Accounting
		142	Banking and Finance	04.02.04	Banking, Finance, Investment
		143	Insurance	04.02.13	Actuarial Studies, Insurance
		149	Financial Services, nec	04.02.04	Banking, Finance, Investment

ABSCQ				FOSCTEC		
Code	е	Title	Code	Title		
2		HEALTH	07	HEALTH, COMMUNITY SERVICES		
21		Medicine	<b>07.05</b> 07.05.01	Medical Science, Medicine Medical Science, Medicine – General		
	211	General Medicine	07.05.02	Medical Science		
	212	Surgery	07.05.03	Medicine, Medical Aid		
	213	Psychiatry	07.05.03	Medicine, Medical Aid		
	214	Obstetrics and Gynaecology	07.05.02 07.05.03	Medical Science Medicine, Medical Aid		
	215	Anaesthesiology	07.05.99	Medical Science, Medicine - Other		
	216	Pathology	07.05.02 07.05.03 07.04.05	Medical Science Medicine, Medical Aid Medical Technology		
	217	Radiology	07.05.02 07.05.03	Medical Science Medicine, Medical Aid		
	218	Internal Medicine	07.05.03 07.04.05	Medicine, Medical Aid Medical Technology		
	219	Medicine, nec	07.05.02 07.05.03 07.05.99	Medical Science Medicine, Medical Aid Medical Science, Medicine – Other		
22		Nursing	-	-		
	221	Basic Nursing	07.04.02	Nursing and Nursing Support - Basic		
	222	Midwifery	07.04.03	Nursing and Nursing Support - Post-basic		
	223	Mothercraft Nursing	07.04.02 07.04.03	Nursing and Nursing Support – Basic Nursing and Nursing Support – Post–basic		
	224	Psychiatric Nursing	07.04.02 07.04.03	Nursing and Nursing Support – Basic Nursing and Nursing Support – Post–basic		
	225	Community Nursing	07.04.03	Nursing and Nursing Support - Post-basic		
	229	Nursing, nec	07.04.02 07.04.03	Nursing and Nursing Support – Basic Nursing and Nursing Support – Post–basic		
23		Health Sciences	<b>07.04</b> 07.04.01	Health Sciences And Technologies Health Sciences and Technologies – General		
	231	Pharmacy	07.04.08 09.03.12	Pharmacy Pharmacology		
	232	Physiotherapy	07.06.03	Physiotherapy		
	233	Occupational Therapy	07.06.02	Occupational Therapy		
	234	Radiography	07.04.04	Medical Imaging		
	235	Optometry	07.04.07	Optometry, Optical Technology		
	236	Chiropractic	07.04.99	Health Sciences and Technologies - Other		
	237	Speech Pathology	07.06.04	Speech Pathology, Audiology		
	238	Nutrition and Dietetics	07.04.06	Nutrition and Dietetics		

	ABSCQ		FOSCTEC			
Code	Title	Code	Title			
239	Health Sciences, nec	07.04.99 07.04.09 07.06.04 07.06.01 07.06.99 09.03.09	Health Sciences and Technologies – Other Podiatry Speech Pathology, Audiology Rehabilitation Services – General Rehabilitation Services – Other Human Movement, Sports Science			
24	Dental Studies	<b>07.02</b> 07.02.01	Dental Services Dental Services – General			
241	Dental Science	07.02.02	Dentistry and Dentistry Support			
242	Dental Assisting	07.02.03 07.02.99 07.02.02	Dental Therapy Dental Services – Other Dentistry and Dentistry Support			
243	Dental Technology	07.02.04	Dental Technology			
25	Veterinary Studies	<b>10.01</b> 10.01.01	Veterinary Science, Animal Care – General Veterinary Science, Animal Care – General			
251	Veterinary Science	10.01.01	Veterinary Science, Animal Care - General			
252	Veterinary Assisting	10.01.01	Veterinary Science, Animal Care - General			
29	Other Health	<b>07.03</b> 07.03.01	Health Support Activities Health Support Activities – General			
291	Ambulance Service	07.03.99 07.05.03	Health Support Activities – Other Medicine, Medical Aid			
292	Occupational Health and Safety	07.03.05	Occupational Health and Safety			
299	Other Health, nec	07.03.99 07.03.03 07.03.04 07.07.01 07.07.05 07.07.99	Health Support Activities – Other Health Counselling Health Surveying/ inspection, Environmental Health Community, Family, Personal Health Care – General Personal Health/ Social/ Recreational Education Community, Family, Personal Health Care – Other			
3	EDUCATION	05 05.01 05.01.01	EDUCATION Education – General Education – General			
31	School Teacher Training	05.02 05.02.01 05.03 05.03.01	Initial School/ TAFE Level Teacher Education (Pre-Service) Initial School/ TAFE Level Teacher Education – General Post-initial School/ TAFE Level Teacher Education Post-initial School/ TAFE Level Teacher Education – General			
311	Early Childhood Teaching	05.02.02 05.03.02	Initial Early Childhood Teacher Education Post-initial Early Childhood Teacher Education			
312	Primary Teaching	05.02.03 05.03.03	Initial Primary Teacher Education Post–initial Primary Teacher Education			
313	Secondary Teaching	05.02.04 05.03.04	Initial Secondary Teacher Education Post–initial Secondary Teacher Education			
314	Teacher-Librarianship	05.02.99 05.03.99	Initial School/ TAFE Level Teacher Education – Other Post–initial School/ TAFE Level Teacher Education – Other			

ABSCQ		FOSCTEC			
Co	de	Title	Code	Title	
32		Post–School Teacher Training	05.02 05.02.01 05.03 05.03.01 05.05	Initial School/ TAFE Level Teacher Education (Pre-Service) Initial School/ TAFE Level Teacher Education – General Post-initial School/ TAFE Level Teacher Education Post-initial School/ TAFE Level Teacher Education – General Other Teacher/ trainer Education	
	321	Technical Teaching	05.05.01 05.02.05 05.03.05 05.02.99 05.03.99	Other Teacher/ trainer Education – General Initial TAFE Teacher Education Post-initial TAFE Teacher Education Initial School/ TAFE Level Teacher Education – Other Post-initial School/ TAFE Level Teacher Education – Other Other Teacher/ trainer Education – Other	
	322	Nursing Education	05.05.02	Nurse and Health Educators Education	
	329	Post-School Teacher Training, nec	05.05.03 05.05.99	Tertiary Educator Education Other Teacher/ trainer Education — Other	
39	1	Other Education	05.04 05.04.01 05.05 05.05.01	Education Other Than Teacher/ trainer Education Education Other Than Teacher/ trainer Education - General Other Teacher/ trainer Education Other Teacher/ trainer Education - General	
	391	Teaching English as a Second Language	05.05.99 05.02.99 05.03.99	Other Teacher/trainer Education – Other Initial School/TAFE Level Teacher Education – Other Post–initial School/TAFE Level Teacher Education – Other	
	392	Special Education	05.02.06 05.03.06	Initial Special Teacher Education Post-initial Special Teacher Education	
	399	Other Education, nec	05.04.03 05.04.04 05.04.99 07.07.05	Educational Counselling Education Media Education Other Than Teacher/ trainer Education — Other Personal Health/ Social/ Recreational Education	
4		SOCIETY AND CULTURE	03 03.01 03.01.01	ARTS, HUMANITIES AND SOCIAL SCIENCES Arts, Humanities and Social Sciences – General Arts, Humanities and Social Sciences – General	
41		Behavioural Studies	<b>03.02</b> 03.02.01	Humanities and Social Sciences Humanities and Social Sciences – General	
	411	Psychology	03.02.15	Psychology	
	412	Sociology and Anthropology	03.02.03 03.02.19 03.02.12	Anthropology Sociology Multicultural Studies	
	413	Politics	03.02.14	Political Science and Government	
	414	History	03.02.09 03.02.04	History Archaeology	
42		Welfare	03.02.20 <b>07.07</b> 07.07.01	Welfare Studies Community, Family, Personal Health Care Community, Family, Personal Health Care – General	
	421	Social Work	03.02.18	Social Work	
	422	Child Care	07.07.02	Child Care, Residential Client Care, Care for Disabled	

	ABSCQ		FOSCTEC
Code	Title	Code	Title
429	Welfare, nec	07.07.02	Child Care, Residential Client Care, Care for Disabled
		07.07.04	Family Care, Community Services
		07.07.99	Community, Family, Personal Health Care - Other
		03.02.07	Counselling
		03.02.20	Welfare Studies
		05.04.03	Educational Counselling
43	Librarianship	03.02.01	Humanities and Social Sciences - General
	-	03.02.10	Library and Archival Studies
431	Librarianship	03.02.10	Library and Archival Studies
44	Language and Area Studies	03.02.01	Humanities and Social Sciences - General
		03.03	Language Studies
		03.03.01	Language Studies – General
441	Literature	03.02.11	Literary Studies
442	Languages	03.03	Language Studies
		03.03.01	Language Studies - General
		03.03.02	Asian Languages
		03.03.03	European Languages other than English
		03.03.04	Linguistics
		03.03.05	English Language
		03.03.06	Languages other than English, European and Asian
		03.03.07	Translating
		03.03.99	Language Studies - Other
449	Language and Area Studies, nec	03.02.05	Area and Ethnic Studies
		03.02.02	Aboriginal Studies
		03.02.12	Multicultural Studies
45	Religion and Philosophy	-	-
451	Religious Studies	03.02.17	Religion and Theology
452	Philosophy	03.02.13	Philosophy
46	Economics	04.03	Economics
		04.03.01	Economics – General
461	Economics	04.03.01	Economics – General
		04.03.02	Agricultural Economics
		04.03.03	Economic History
		04.03.04	Economic Statistics, Econometrics
		04.03.99	Economics – Other
47	Law	08.02	Law
		08.02.01	Law – General
		08.04	Legal Studies
471	Law	08.02.01	Law – General
		08.02.02	Jurisprudence
		08.02.03	Legal Practice
		08.02.99	Law – Other
		08.04.01	Legal Studies – General
48	Visual and Performing Arts	03.04	Visual and Performing Arts
	6	03.04.01	Visual and Performing Arts – General
481	Music	03.04.09	Music
.01		5510 1107	

	ABSCQ	FOSCTEC		
Code	Title	Code	Title	
482	Art and Craft	03.04.03 03.04.07	Crafts, Omaments Fine Arts	
483	Photography	03.04.06	Film and Photography Arts	
484	Graphic Design	03.04.08	Graphic Arts and Design	
485	Fashion Design	03.04.10	Fashion Design	
486	Drama and Dance	03.04.05 03.04.04	Dramatic Arts Dance	
489	Visual and Performing Arts, nec	03.04.03 03.04.99	Crafts, Omaments Visual and Performing Arts – Other	
49	Other Society and Culture	03.02.01	Humanities and Social Sciences - General	
491	Geography	03.02.08	Geography	
492	Communication	03.02.06 03.04.06 04.02.14	Communications, Journalism, Broadcasting Film and Photography Arts Advertising, Public Relations	
493	Recreation and Leisure	03.02.16	Recreation Studies	
494	Policing Studies	08.03 08.03.01 08.03.02 08.03.03 08.03.99	Justice Administration, Law Enforcement Justice Administration, Law Enforcement – General Justice Administration Law Enforcement Justice Administration, Law Enforcement – Other	
499	Other Society and Culture, nec	03.02.21 03.02.99 <b>02.04</b> 02.04.01 03.02.12 04.02.06 04.02.15	Women's Studies Humanities and Social Sciences – Other Urban and Regional Planning Urban and Regional Planning – General Multicultural Studies Industrial Relations Home Management	
5	NATURAL AND PHYSICAL SCIENCES	<b>09</b> <b>09.01</b> 9.01.01	SCIENCE Science – General Science – General	
51	Life Sciences	<b>09.03</b> 09.03.01	Life, General Sciences Life, General Sciences – General	
511	Biological Science	09.03.02 09.03.03 09.03.04 09.03.05 09.03.09 09.03.11 09.03.13 09.03.14 09.03.15 09.03.99	Anatomy Biochemistry Biology Botany Human Movement, Sports Science Microbiology, Bacteriology, Virology Physiology Zoology Marine Science Life, General Sciences – Other	
512	Environmental Science	09.03.06 01.04.03 01.04.04 01.04.01 01.04.99	Environmental Science Parks and Wildlife Management Conservation Land, Parks and Agriculture Management – General Land, Parks and Agriculture Management – Other	
52	Physical Science	<b>09.05</b> 09.05.01	Physical Sciences Physical Sciences – General	

	ABSCQ			FOSCTEC			
Code		Title	Code	Title			
	<b>70.</b> 1	The state of the s	00.05.05	Die in			
	521	Physics	09.05.05	Physics			
:	522	Chemistry	09.05.02	Chemistry			
:	523	Earth Science	09.05.03 09.03.15 01.02.04	Geology, Earth Sciences Marine Science Soil Sciences			
:	529	Physical Science, nec	09.05.99	Physical Sciences – Other			
53		Mathematics and Statistics	<b>09.04</b> 09.04.01	Mathematics Mathematics – General			
;	531	Mathematics	09.04.02 09.04.03 09.04.04 09.04.99	Applied Mathematics Pure Mathematics Statistics, Operations Research Mathematics – Other			
1	532	Statistics	09.04.04 04.02.13	Statistics, Operation Research Actuarial Studies, Insurance			
54		Computer Science	<b>09.02</b> 09.02.01	Computer Science, Information Systems Computer Science, Information Systems - General			
	541	Computer Science	09.02.01	Computer Science, Information Systems  - General			
			09.02.02	Computer Science			
			09.02.03	Computer-based Information Science			
			09.02.99	Computer Science, Information Systems – Other			
			06.02.06 04.02.05	Electronic, Computer, Communications Engineering/ technologies Business/ administration Data Processing			
59		Other Natural and Physical Sciences	_	_			
	591	Food Science	09.03.07	Food Science			
			06.02.14	Food Technology			
			01.02.06	Viticulture and Oenology			
	592	Laboratory Technology	09.03.10 07.04.05	Laboratory Techniques Medical Technology			
	599	Other Natural and Physical Sciences, nec	03.04.02	Conservation of Art and Cultural Material			
6		ENGINEERING	06 06.01 06.01.01 06.02 06.02.01	ENGINEERING, SURVEYING Engineering, Surveying – General Engineering, Surveying – General Engineering and Related Technologies Engineering and Related Technologies – General			
61		Surveying and Cartography	06.03 06.03.01	Surveying Surveying – General			
	611	Surveying	06.03.03 06.03.99	Surveying, Survey Drafting Surveying – Other			
	612	Cartography	06.03.02	Cartography			
62		Civil Engineering	06.02.04	Civil, Structural Engineering/technologies			
	621	Civil Engineering	06.02.04	Civil, Structural Engineering/technologies			

	ABSCQ		FOSCTEC		
Code	Title	Code	Title		
63	Electrical and Electronic Engineering				
63		06.02.05 06.02.06	Electrical Engineering/ technologies Electronic, Computer, Communications Engineering/ technologies		
63	2 Powerline Installation and Maintenance	06.02.05	Electrical Engineering/technologies		
63	3 Electrical Fitting	06.02.05	Electrical Engineering/technologies		
63	4 Automotive Electrics	06.02.12	Automotive Engineering/technologies		
63	<ol> <li>Refrigeration and Air-conditioning Mechanics</li> </ol>	06.02.13	Environmental Engineering/technologies		
63	6 Electrical Mechanics	06.02.05	Electrical Engineering/ technologies		
63	7 Communications Equipment Installation and Maintenance	06.02.06	Electronic, Computer, Communications Engineering/technologies		
63	8 Electronic Equipment Servicing	06.02.06	Electronic, Computer, Communications Engineering/technologies		
63	9 Electrical and Electronic Engineering, nec	06.02.05 06.02.06 06.02.99	Electrical Engineering/ technologies Electronic, Computer, Communications Engineering/ technologies Engineering and Related Technologies – Other		
64	Mechanical Engineering	06.02.09	Mechanical Engineering/technologies, Fabrication		
64	1 Mechanical Engineering Science	06.02.09	Mechanical Engineering/technologies, Fabrication		
64	2 Toolmaking	06.02.09 06.02.10	Mechanical Engineering/technologies, Fabrication Metallurgical Engineering/technologies		
64	3 Metal Fitting, Turning and Machining	06.02.09	Mechanical Engineering/technologies, Fabrication		
64	4 Sheetmetal Working	06.02.09	Mechanical Engineering/technologies, Fabrication		
64	5 Boilermaking and Welding	06.02.09	Mechanical Engineering/technologies, Fabrication		
64	6 Metal Casting and Patternmaking	06.02.10	Metallurgical Engineering/technologies		
64	7 Aircraft Maintenance Engineering	06.02.02	Aeronautical Engineering/technologies		
64	8 Precision Metal Working	06.02.09	Mechanical Engineering/technologies, Fabrication		
64	9 Mechanical Engineering, nec	06.02.09 06.02.99 06.02.10	Mechanical Engineering/technologies, Fabrication Engineering and Related Technologies – Other Metallurgical Engineering/technologies		
65	Metallurgical and Mining Engineering	_	_		
65		06.02.10	Metallurgical Engineering/technologies		
65		06.02.11	Mining/ minerals Engineering/ technologies		
65	9 Metallurgical and Mining Engineering, nec	06.02.99	Engineering and Related Technologies – Other		
66	Printing	06.02.15	Printing Engineering/technologies		
66	1 Compositing	06.02.15	Printing Engineering/technologies		
66	2 Graphic Reproduction	06.02.15	Printing Engineering/technologies		
66	3 Printing Machining	06.02.15	Printing Engineering/technologies		
66	4 Binding and Finishing	06.02.15	Printing Engineering/ technologies		
66	5 Screen Printing	06.02.15	Printing Engineering/ technologies		
66	9 Printing, nec	06.02.15	Printing Engineering/technologies		

	ABSCQ		FOSCTEC			
Code	Title	Code	Title			
67	Automotive Engineering	06.02.12	Automotive Engineering / technologies			
671	Automotive Engineering	06.02.12	Automotive Engineering / technologies			
672	Vehicle Mechanics	06.02.12	Automotive Engineering / technologies			
673	Panel Beating	06.02.12	Automotive Engineering / technologies			
674	Vehicle Painting	06.02.12	Automotive Engineering/ technologies			
675	Vehicle Building	06.02.12	Automotive Engineering/ technologies			
676	Vehicle Trimming	06.02.12	Automotive Engineering/ technologies			
679	Automotive Engineering, nec	06.02.12	Automotive Engineering/ technologies			
0.7			Tatomotive Engineering technologies			
68	Textiles, Clothing and Footwear	06.02.16 11.04	Textiles, Soft Furnishings, Apparel Engineering/technologies Apparel Sales, Services			
		11.04.01	Apparel Sales, Services – General			
681	Textile Engineering Science	06.02.16	Textiles, Soft Furnishings, Apparel Engineering/technologies			
682	Garment Making	06.02.16	Textiles, Soft Furnishings, Apparel Engineering/technologies			
<b></b>		11.04.02	Clothing, Clothing Materials			
683	Upholstery	02.03.07 02.03.10	Cabinet-making, Woodworking, Furniture Construction Furnishing, Floor Covering			
684	Footwear	06.02.16 11.04.03	Textiles, Soft Furnishings, Apparel Engineering/ technologies			
689	Textiles, Clothing and Footwear, nec	06.02.16	Footwear, Leatherwork			
007	Textiles, Cioning and Footwear, nec	00.02.10	Textiles, Soft Furnishings, Apparel Engineering / technologies			
		11.04.03 11.04.99	Footwear, Leatherwork Apparel Sales, Services – Other			
		11.01.55	Apparol Galos, Gervices – Other			
69	Other Engineering	-	-			
691	Chemical Engineering Science	06.02.03	Chemical / plastics Engineering/ technologies			
692	Aeronautical Engineering Science	06.02.02	Aeronautical Engineering/technologies			
693	Industrial Engineering Science	06.02.07 06.02.06	Industrial Engineering/technologies Electronic, Computer, Communications Engineering / technologies			
694	Marine Engineering Science	06.02.08	Marine Engineering/technologies			
695	Other Engineering Science	06.02.99 06.02.08 02.02.99	Engineering and Related Technologies – Other Marine Engineering / technologies Architecture – Other			
696	Marine Construction	06.02.08	Marine Engineering/ technologies			
697	Wood Machining and Turning	02.03.07	Cabinet-making, Woodworking, Furniture Construction			
698	Cabinet Making	02.03.07	Cabinet-making, Woodworking, Furniture Construction			
699	Other Engineering, nec	06.02.99 06.02.03 02.03.07	Engineering and Related Technologies – Other Chemical/ plastics Engineering / technologies Cabinet–making, Woodworking, Furniture Construction			

ABSCQ		FOSCTEC			
Ca	ode	Title	Code	Title	
7		ARCHITECTURE AND BUILDING	02 02.01 02.01.01	ARCHITECTURE, BUILDING Architecture, Building – General Architecture, Building – General	
71	l	Building Design	<b>02.02</b> 02.02.01	Architecture Architecture – General	
	711	Architecture	02.02.01	Architecture – General	
	712	Interior Design	02.03.03 02.02.02	Interior Design/ decoration Environmental Design	
	719	Building Design, nec	02.02.99 02.02.03 02.02.02	Architecture – Other Landscape Architecture Environmental Design	
72	2	<b>Building Construction</b>	<b>02.03</b> 02.03.01	Building Building – General	
	721	Building Technology	02.03.02 02.03.06	Building Technology Building Construction	
	722	Carpentry and Joinery	02.03.08	Carpentry, Joinery	
	723	Bricklaying	02.03.05	Bricklaying, Stonemasonry, Tile Fixing, Concreting	
	724	Painting, Decorating and Signwriting	02.03.12	Painting, Decorating, Signwriting	
	725	Plastering	02.03.09	Ceiling, Wall, Floor and Roof Fixing, Plastering	
	726	Plumbing	02.03.13	Plumbing, Gas-fitting, Draining	
	727	Roof Fixing	02.03.09	Ceiling, Wall, Floor and Roof Fixing, Plastering	
	728	Floor and Wall Tiling	02.03.05 02.03.09	Bricklaying, Stonemasonry, Tile Fixing, Concreting Ceiling, Wall, Floor and Roof Fixing, Plastering	
	729	Building Construction, nec	02.03.99 02.03.05 02.03.06	Building – Other Bricklaying, Stonemasonry, Tile Fixing, Concreting Building Construction	
79	)	Other Architecture and Building	-	-	
	791	Floor Covering	02.03.10	Furnishing, Floor Covering	
	792	Glass Working	02.03.11	Glazing	
	793	Quantity Surveying	02.03.04	Quantity Surveying	
	799	Other Architecture and Building, nec	02.02.99 02.03.99	Architecture – Other Building – Other	
8		AGRICULTURE AND RELATED FIELDS	01	LAND AND MARINE RESOURCES, ANIMAL HUSBANDRY	
			01.01	Land and Marine Resources, Animal Husbandry  - General	
			01.01.01	Land and Marine Resources, Animal Husbandry - General	
81	I	Agriculture	01.02 01.02.01 01.03 01.03.01	Agriculture, Forestry Agriculture, Forestry – General Animal Husbandry Animal Husbandry – General	

ABSCQ		FOSCTEC		
Code	Title	Code	Title	
811	Agricultural Science	01.02.07	Agronomy	
		01.02.04 01.04.01	Soil Sciences Land, Parks and Agriculture Management – General	
		01.04.01	Rural Management	
		01.03.02	Animal Farming/ breeding	
812	Wool Science	01.03.02	Animal Farming/ breeding	
		01.05.01	Agricultural/ Land/ Rural Services and Supplies - General	
813	Animal Husbandry	01.03.01	Animal Husbandry – General	
		01.03.02	Animal Farming/ breeding	
		01.03.99	Animal Husbandry – Other	
819	Agriculture, nec	01.02.99	Agriculture, Forestry -Other	
		01.03.03	Animal Health Inspection	
		01.04.99	Land, Parks and Agriculture Management - Other	
82	Horticulture	01.02.05	Horticulture - Ornamental and Utilitarian	
821	Horticulture	01.02.01	Agriculture, Forestry - General	
		01.02.05	Horticulture - Ornamental and Utilitarian	
		01.02.06	Viticulture and Oenology	
89	Other Agriculture and Related Fields	01.02.01	Agriculture, Forestry – General	
0)	Other Agriculture and Related Fields	01.02.99	Agriculture, Forestry – Other	
891	Fisheries	01.06	Fishing and Fisheries	
071	Tisheries	01.06.01	Fishing and Fisheries – General	
892	Forestry	01.02.02	Forestry and Timber	
9	MISCELL ANEQUIS EIELDS	11	CEDVICES HOSDITALITY TO ANSDODTATION	
9	MISCELLANEOUS FIELDS	11 11.01	SERVICES, HOSPITALITY, TRANSPORTATION Services, Hospitality, Transportation – General	
		11.01.01	Services, Hospitality, Transportation – General	
91	Hairdressing and Beauty Therapy	11.05	Other Services	
		11.05.01	Other Services – General	
911	Hairdressing	11.05.02	Hairdressing, Cosmetology	
912	Beauty Therapy	11.05.02	Hairdressing, Cosmetology	
92	Food and Hospitality Services	11.02	Food/ Beverage, Hospitality, Tourism	
		11.02.01	Food/ beverage, Hospitality, Tourism – General	
921	Meat Processing	11.02.03	Butchery	
922	Baking and Pastrycooking	11.02.02	Bakery	
923	Cooking	11.02.04	General Cooking	
924	Hospitality Services	11.02.05	Hotel, Hospitality, Tourism	
925	Waiting and Bar Service	11.02.05	Hotel, Hospitality, Tourism	
929	Food and Hospitality Services, nec	11.02.99	Food/ beverage, Hospitality, Tourism – Other	
72)	Tood and Hospitality Services, nec	11.02.77	1000 beverage, mospitality, Tourism – Other	
93	Transport	11.03	Transportation	
		11.03.01	Transportation – General	
931	Ship Operation	09.05.04	Nautical Science	
		11.03.02	Transportation/materials Handling Operators	
		11.03.03	Transportation/material Storage Services	
932	Aircraft Operation	11.03.02	Transportation/materials Handling Operators	
		11.03.03	Transportation/ material Storage Services	

	ABSCQ		FOSCTEC		
Code	Title	Code	Tüle		
933 939	Air Traffic Control Transport, nec	11.03.02 11.03.99	Transportation/ materials Handling Operators  Transport – Other		
99	Other Miscellaneous Fields	_	-		
991	Plant and Machine Operation	-	-		
992	Fire Technology	-	-		
999	Other Miscellaneous Fields, nec	-	-		

# **ABSCQ**

## **APPENDIX 2**

LINK BETWEEN THE FIELD OF STUDY CLASSIFICATION OF TERTIARY EDUCATION COURSES (FOSCTEC) AND THE ABSCQ

Code	Title	Code	Title
	LAND AND MARINE RESOURCES, ANIMAL HUSBANDRY	8	AGRICULTURE AND RELATED FIELDS
01.01	Land and Marine Resources, Animal Husbandry – General	8	AGRICULTURE AND RELATED FIELDS
01.01.01	Land and Marine Resources, Animal Husbandry  - General	8	AGRICULTURE AND RELATED FIELDS
01.02	Agriculture, Forestry	81	Agriculture
01.02.01	Agriculture, Forestry – General	81 89 821	Agriculture Other Agriculture and Related Fields Horticulture
01.02.02	Forestry and Timber	892	Forestry
01.02.04	Soil Sciences	523 811	Earth Science Agricultural Science
01.02.05	Horticulture – Ornamental and Utilitarian	<b>82</b> 821	Horticulture Horticulture
01.02.06	Viticulture and Oenology	591 821	Food Science Horticulture
01.02.07	Agronomy	811	Agricultural Science
01.02.99	Agriculture, Forestry – Other	<b>89</b> 819	Other Agriculture and Related Fields Agriculture, nec
01.03	Animal Husbandry	81	Agriculture
01.03.01	Animal Husbandry – General	<b>81</b> 813	Agriculture Animal Husbandry
01.03.02	Animal Farming/ breeding	811 812 813	Agricultural Science Wool Science Animal Husbandry
01.03.03	Animal Health Inspection	819	Agriculture, nec
01.03.99	Animal Husbandry – Other	813	Animal Husbandry
01.04	Land, Parks and Agriculture Management	-	_
01.04.01	Land, Parks and Agriculture Management - General	512 811	Environmental Science Agricultural Science
01.04.02	Rural Management	119 811	Management, nec Agricultural Science
01.04.03	Parks and Wildlife Management	512	Environmental Science
01.04.04	Conservation	512	Environmental Science
01.04.99	Land, Parks and Agriculture Management - Other	512 819	Environmental Science Agriculture, nec
01.05	Agricultural/ Land/ Rural Services and Supplies	131	Wholesale and Retail Sales
01.05.01	Agricultural/ Land/ Rural Services and Supplies  – General	131 812	Wholesale and Retail Sales Wool Science

Code	Title	Code	Title
01.06	Fishing and Fisheries	891	Fisheries
01.06.01	Fishing and Fisheries – General	891	Fisheries
2	ARCHITECTURE, BUILDING	7	ARCHITECTURE AND BUILDING
02.01	Architecture, Building – General	7	ARCHITECTURE AND BUILDING
02.01.01	Architecture, Building - General	7	ARCHITECTURE AND BUILDING
02.02	Architecture	71	Building Design
02.02.01	Architecture – General	<b>71</b> 711	Building Design Architecture
02.02.02	Environmental Design	712 719	Interior Design Building Design, nec
02.02.03	Landscape Architecture	719	Building Design, nec
02.02.99	Architecture – Other	695 719 799	Other Engineering Science Building Design, nec Other Architecture and Building, nec
02.03	Building	72	<b>Building Construction</b>
02.03.01	Building – General	72	<b>Building Construction</b>
02.03.02	Building Technology	721	Building Technology
02.03.03	Interior Design/ decoration	712	Interior Design
02.03.04	Quantity Surveying	793	Quantity Surveying
02.03.05	Bricklaying, Stonemasonry, Tile Fixing, Concreting	723 728 729	Bricklaying Floor and Wall Tiling Building Construction, nec
02.03.06	Building Construction	721 729	Building Technology Building Construction, nec
02.03.07	Cabinet-making, Woodworking, Furniture Construction	683 697 698 699	Upholstery Wood Machining and Turning Cabinet Making Other Engineering, nec
02.03.08	Carpentry, Joinery	722	Carpentry and Joinery
02.03.09	Ceiling, Wall, Floor and Roof Fixing, Plastering	725 727 728	Plastering Roof Fixing Floor and Wall Tiling
02.03.10	Furnishing, Floor Covering	683 791	Upholstery Floor Covering
02.03.11	Glazing	792	Glass Working
02.03.12	Painting, Decorating, Signwriting	724	Painting, Decorating and Signwriting
02.03.13	Plumbing, Gas-fitting, Draining	726	Plumbing
02.03.99	Building – Other	729 799	Building Construction, nec Other Architecture and Building, nec

Code	Title		Title
02.04	Urban and Regional Planning	499	Other Society and Culture, nec
02.04.01	Urban and Regional Planning – General	499	Other Society and Culture, nec
3	ARTS, HUMANITIES AND SOCIAL SCIENCES	4	SOCIETY AND CULTURE
03.01	Arts, Humanities and Social Sciences – General	4	SOCIETY AND CULTURE
03.01.01	Arts, Humanities and Social Sciences - General	4	SOCIETY AND CULTURE
03.02	Humanities and Social Sciences	41	Behavioural Studies
03.02.01	Humanities and Social Sciences – General	41 44 43 49	Behavioural Studies Language and Area Studies Librarianship Other Society and Culture
03.02.02	Aboriginal Studies	449	Language and Area Studies, nec
03.02.03	Anthropology	412	Sociology and Anthropology
03.02.04	Archaeology	414	History
03.02.05	Area and Ethnic Studies	449	Language and Area Studies, nec
03.02.06	Communications, Journalism, Broadcasting	492	Communication
03.02.07	Counselling	429	Welfare, nec
03.02.08	Geography	491	Geography
03.02.09	History	414	History
03.02.10	Library and Archival Studies	<b>43</b> 431	Librarianship Librarianship
03.02.11	Literary Studies	441	Literature
03.02.12	Multicultural Studies	412 449 499	Sociology and Anthropology Language and Area Studies, nec Other Society and Culture, nec
03.02.13	Philosophy	452	Philosophy
03.02.14	Political Science and Government	413	Politics
03.02.15	Psychology	411	Psychology
03.02.16	Recreation Studies	493	Recreation and Leisure
03.02.17	Religion and Theology	451	Religious Studies
03.02.18	Social Work	421	Social Work
03.02.19	Sociology	412	Sociology and Anthropology
03.02.20	Welfare Studies	<b>42</b> 429	Welfare Welfare, nec
03.02.21	Women's Studies	499	Other Society and Culture, nec
03.02.99	Humanities and Social Sciences - Other	499	Other Society and Culture, nec

Code	Title	Code	Title
03.03	Language Studies	<b>44</b> 442	Language and Area Studies Languages
03.03.01	Language Studies - General	<b>44</b> 442	Language and Area Studies Languages
03.03.02	Asian Languages	442	Languages
03.03.03	European Languages other than English	442	Languages
03.03.04	Linguistics	442	Languages
03.03.05	English Language	442	Languages
03.03.06	Languages other than English, European and Asian	442	Languages
03.03.07	Translating	442	Languages
03.03.99	Language Studies - Other	442	Languages
03.04	Visual and Performing Arts	48	Visual and Performing Arts
03.04.01	Visual and Performing Arts - General	48	Visual and Performing Arts
03.04.02	Conservation of Art and Cultural Material	599	Other Natural and Physical Sciences, nec
03.04.03	Crafts, Ornaments	482 489	Art and Craft Visual and Performing Arts, nec
03.04.04	Dance	486	Drama and Dance
03.04.05	Dramatic Arts	486	Drama and Dance
03.04.06	Film and Photographic Arts	483 492	Photography Communication
03.04.07	Fine Arts	482	Art and Craft
03.04.08	Graphic Arts and Design	484	Graphic Design
03.04.09	Music	481	Music
03.04.10	Fashion Design	485	Fashion Design
03.04.99	Visual and Performing Arts – Other	489	Visual and Performing Arts, nec
4	BUSINESS, ADMINISTRATION, ECONOMICS	1	BUSINESS AND ADMINISTRATION
04.01	Business, Administration, Economics – General	1	BUSINESS AND ADMINISTRATION
04.01.01	Business, Administration, Economics – General	1	BUSINESS AND ADMINISTRATION
04.02	Business, Administration, Management	11	Management
04.02.01	Business, Administration, Management - General	11	Management
04.02.02	Accounting	141	Accounting
04.02.03	Administration, General Management and Supervision	111	Business Management
04.02.04	Banking, Finance, Investment	142 149	Banking and Finance Financial Services, nec

Code	Title	Code	Title
04.02.05	Business/ administration Data Processing	122 541	Keyboarding and Shorthand Computer Science
04.02.06	Industrial Relations	499	Other Society and Culture, nec
04.02.08	Marketing, Distribution, Import/ export	119 131 132	Management, nec Wholesale and Retail Sales Marketing
		139	Sales and Marketing, nec
04.02.09	Personnel Management and Development	113	Personnel Management
04.02.10	Public Administration	112	Public and Institution Management
04.02.11	Secretarial, Word-processing, Clerical	121 122 129	Office Management Keyboarding and Shorthand Management Support Services, nec
04.02.12	Valuation and Real Estate	133	Real Estate
04.02.13	Actuarial Studies, Insurance	143 532	Insurance Statistics
04.02.14	Advertising, Public Relations	139 492	Sales and Marketing, nec Communication
04.02.15	Home Management	499	Other Society and Culture, nec
04.02.16	Small Business Management	111	Business Management
04.02.99	Business, Administration, Management - Other	119	Management, nec
04.03	Economics	46	Economics
04.03.01	Economics – General	<b>46</b> 461	Economics Economics
04.03.02	Agricultural Economics	461	Economics
04.03.03	Economic History	461	Economics
04.03.04	Economic Statistics, Econometrics	461	Economics
04.03.99	Economics – Other	461	Economics
05	EDUCATION	3	EDUCATION
05.01	Education – General	3	EDUCATION
05.01.01	Education - General	3	EDUCATION
05.02	Initial School/ TAFE Level Teacher Education (Pre–Service)	31 32	School Teacher Training Post–School Teacher Training
05.02.01	Initial School/ TAFE Level Teacher Education  – General	31 32	School Teacher Training Post-School Teacher Training
05.02.02	Initial Early Childhood Teacher Education	311	Early Childhood Teaching
05.02.03	Initial Primary Teacher Education	312	Primary Teaching
05.02.04	Initial Secondary Teacher Education	313	Secondary Teaching
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Code	Title	Code	Tüle
05.02.05	Initial TAFE Teacher Education	321	Technical Teaching
05.02.06	Initial Special Teacher Education	392	Special Education
05.02.99	Initial School/ TAFE Level Teacher Education – Other	314 321 391	Teacher–Librarianship Technical Teaching Teaching English as a Second Language
05.03	Post-initial School/ TAFE Level Teacher Education	31 32	School Teacher Training Post-School Teacher Training
05.03.01	Post-initial School/ TAFE Level Teacher Education - General	31 32	School Teacher Training Post–School Teacher Training
05.03.02	Post-initial Early Childhood Teacher Education	311	Early Childhood Teaching
05.03.03	Post-initial Primary Teacher Education	312	Primary Teaching
05.03.04	Post-initial Secondary Teacher Education	313	Secondary Teaching
05.03.05	Post-initial TAFE Teacher Education	321	Technical Teaching
05.03.06	Post-initial Special Teacher Education	392	Special Education
05.03.99	Post-initial School/ TAFE Level Teacher Education - Other	314 321 391	Teacher-Librarianship Technical Teaching Teaching English as a Second Language
05.04	Education Other Than Teacher/ trainer Education	39	Other Education
05.04.01	Education Other Than Teacher/ trainer Education – General	39	Other Education
05.04.02	Educational Administration	112	Public and Institution Management
05.04.03	Educational Counselling	399 429	Other Education, nec Welfare, nec
05.04.04	Education Media	399	Other Education, nec
05.04.99	Education Other Than Teacher/ trainer Education – Other	399	Other Education, nec
5.05	Other Teacher/ trainer Education	32 39	Post–School Teacher Training Other Education
05.05.01	Other Teacher/ trainer Education – General	32 39	Post-School Teacher Training Other Education
05.05.02	Nurse and Health Educators Education	322	Nursing Education
05.05.03	Tertiary Educator Education	329	Post-School Teacher Training, nec
05.05.99	Other Teacher/trainer Education - Other	321 329	Technical Teaching Post–School Teacher Training, nec

Code	Title	Code	Title
	ENGINEERING, SURVEYING	6	ENGINEERING
06.01	Engineering, Surveying – General	6	ENGINEERING
06.01.01	Engineering, Surveying – General	6	ENGINEERING
06.02	Engineering and Related Technologies	6	ENGINEERING
06.02.01	Engineering and Related Technologies - General	6	ENGINEERING
06.02.02	Aeronautical Engineering/technologies	647 692	Aircraft Maintenance Engineering Aeronautical Engineering Science
06.02.03	Chemical/ plastics Engineering/ technologies	691 699	Chemical Engineering Science Other Engineering, nec
06.02.04	Civil, Structural Engineering/technologies	62 621	Civil Engineering Civil Engineering
06.02.05	Electrical Engineering/ technologies	631 632 633 636 639	Electrical and Electronic Engineering Science Powerline Installation and Maintenance Electrical Fitting Electrical Mechanics Electrical and Electronic Engineering, nec
06.02.06	Electronic, Computer, Communications Engineering/technologies	541 631 637 638 639 693	Computer Science Electrical and Electronic Engineering Science Communication Equipment Installation and Maintenance Electronic Equipment Servicing Electrical and Electronic Engineering, nec Industrial Engineering Science
06.02.07	Industrial Engineering/ technologies	693	Industrial Engineering Science
06.02.08	Marine Engineering/technologies	694 695 696	Marine Engineering Science Other Engineering Science Marine Construction
06.02.09	Mechanical Engineering/technologies, Fabrication	64 641 642 643 644 645 648 649	Mechanical Engineering Mechanical Engineering Science Toolmaking Metal Fitting, Turning and Machining Sheetmetal Working Boilermaking and Welding Precision Metal Working Mechanical Engineering, nec
06.02.10	Metallurgical Engineering/technologies	642 646 649 651	Toolmaking Metal Casting and Patternmaking Mechanical Engineering, nec Metallurgical Engineering Science
06.02.11	Mining/minerals Engineering/technologies	652	Mining Engineering Science
06.02.12	Automotive Engineering/technologies	67 634 671 672 673	Automotive Engineering Automotive Electrics Automotive Engineering Science Vehicle Mechanics Panel Beating
		674 675 676 679	Vehicle Painting Vehicle Building Vehicle Trimming Automotive Engineering, nec

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Code	Title	Code	Title
06.02.14	Food Technology	591	Food Science
06.02.15	Printing Engineering/technologies	66 661 662 663 664 665 669	Printing Compositing Graphic Reproduction Printing Machining Binding and Finishing Screen Printing Printing, nec
06.02.16	Textiles, Soft Furnishings, Apparel Engineering/technologies	68 681 682 684 689	Textiles, Clothing and Footwear Textile Engineering Science Garment Making Footwear Textiles, Clothing and Footwear, nec
06.02.99	Engineering and Related Technologies - Other	639 649 659 695	Electrical and Electronic Engineering, nec Mechanical Engineering, nec Metallurgical and Mining Engineering, nec Other Engineering Science Other Engineering, nec
06.03	Surveying	61	Surveying and Cartography
06.03.01	Surveying – General	61	Surveying and Cartography
06.03.02	Cartography	612	Cartography
06.03.03	Surveying, Survey Drafting	611	Surveying
06.03.99	Surveying – Other	611	Surveying
,	HEALTH, COMMUNITY SERVICES	2	HEALTH
07.01	Health, Community Services – General	2 42	HEALTH Welfare
07.01.01	Health, Community Services – General	2 42	HEALTH Welfare
07.02	Dental Services	24	Dental Studies
07.02.01	Dental Services – General	24	Dental Studies
07.02.02	Dentistry and Dentistry Support	241 242	Dental Science Dental Assisting
07.02.03	Dental Therapy	242	Dental Assisting
07.02.04	Dental Technology	243	Dental Technology
07.02.99	Dental Services - Other	242	Dental Assisting
07.03	Health Support Activities	29	Other Health
07.03.01	Health Support Activities – General	29	Other Health
07.03.02	Health and Health Care Administration	112 121	Public and Institution Management Office Management

Code	Title	Code	Title
07.03.03	Health Counselling	299	Other Health, nec
07.03.04	Health Surveying/inspection, Environmental Health	299	Other Health, nec
07.03.05	Occupational Health and Safety	292	Occupational Health and Safety
07.03.99	Health Support Activities – Other	291	Ambulance Service
07.03.33	Headii Support Activities – Other	299	Other Health, nec
07.04	Health Sciences and Technologies	23	Health Sciences
07.04.01	Health Sciences and Technologies - General	23	Health Sciences
07.04.02	Nursing and Nursing Support – Basic	221 Basic Nursing 223 Mothercraft Nursing 224 Psychiatric Nursing 229 Nursing, nec	
07.04.03	Nursing and Nursing Support – Post–basic	222 223 224 225 229	Midwifery Mothercraft Nursing Psychiatric Nursing Community Nursing Nursing, nec
07.04.04	Medical Imaging	234	Radiography
07.04.05	Medical Technology	216 218 592	Pathology Internal Medicine Laboratory Technology
07.04.06	Nutrition and Dietetics	238	Nutrition and Dietetics
07.04.07	Optometry, Optical Technology	235	Optometry
07.04.08	Pharmacy	231	Pharmacy
07.04.09	Podiatry	239	Health Sciences, nec
07.04.99	Health Sciences and Technologies - Other	236 239	Chiropractic Health Sciences, nec
07.05	Medical Science, Medicine	21	Medicine
07.05.01	Medical Science, Medicine – General	21	Medicine
07.05.02	Medical Science	211 214 216 217 219	General Medicine Obstetrics and Gynaecology Pathology Radiology Medicine, nec
07.05.03	Medicine, Medical Aid	212 213 214 216 217 218 219 291	Surgery Psychiatry Obstetrics and Gynaecology Pathology Radiology Internal Medicine Medicine, nec Ambulance Service
07.05.99	Medical Science, Medicine – Other	215 219	Anaesthesiology Medicine, nec
07.06	Rehabilitation Services	23	Health Sciences

Code	Title	Code	Title
07.06.02	Occupational Therapy	233	Occupational Therapy
07.06.03	Physiotherapy	232	Physiotherapy
07.06.04	Speech Pathology, Audiology	237 239	Speech Pathology Health Sciences, nec
07.06.99	Rehabilitation Services - Other	239	Health Sciences, nec
07.07	Community, Family, Personal Health Care	42	Welfare
07.07.01	Community, Family, Personal Health Care – General	299 <b>42</b>	Other Health, nec Welfare
07.07.02	Child Care, Residential Client Care, Care for Disabled	422 429	Child Care Welfare, nec
07.07.04	Family Care, Community Services	429	Welfare, nec
07.07.05	Personal Health/ Social/ Recreational Education	299 399	Other Health, nec Other Education, nec
07.07.99	Community, Family, Personal Health Care – Other .	299 429	Other Health, nec Welfare, nec
8	LAW, LEGAL STUDIES	47	Law
08.01	Law, Legal Studies – General	47	Law
08.01.01	Law, Legal Studies - General	47	Law
08.02	Law	47	Law
08.02.01	Law – General	47	Law
08.02.02	Jurisprudence	471	Law
08.02.03	Legal Practice	471	Law
08.02.99	Law - Other	471	Law
08.03	Justice Administration Law Enforcement	494	Policing Studies
08.03.01	Justice Administration, Law Enforcement - General	494	Policing Studies
08.03.02	Justice Administration	112 494	Public and Institution Management Policing Studies
08.03.03	Law Enforcement	112 494	Public and Institution Management Policing Studies
08.03.99	Justice Administration, Law Enforcement - Other	494	Policing Studies
00.03.77			
08.04	Legal Studies	47	Law

Code	Title		Title	
	SCIENCE	5	NATURAL AND PHYSICAL SCIENCES	
09.01	Science – General	5	NATURAL AND PHYSICAL SCIENCES	
09.01.01	Science – General	5	NATURAL AND PHYSICAL SCIENCES	
09.02	Computer Science, Information Systems	54	Computer Science	
09.02.01	Computer Science, Information Systems  - General	<b>54</b> 541	Computer Science Computer Science	
09.02.02	Computer Science	541	Computer Science	
09.02.03	Computer-based Information Science	541	Computer Science	
09.02.99	Computer Science, Information Systems - Other	541	Computer Science	
09.03	Life, General Sciences	51	Life Sciences	
09.03.01	Life, General Sciences - General	51	Life Sciences	
09.03.02	Anatomy	511	Biological Science	
09.03.03	Biochemistry	511	Biological Science	
09.03.04	Biology	511	Biological Science	
09.03.05	Botany	511	Biological Science	
09.03.06	Environmental Science	512	Environmental Science	
09.03.07	Food Science	591	Food Science	
09.03.09	Human Movement, Sports Science	239 511	Health Sciences, nec Biological Science	
09.03.10	Laboratory Techniques	592	Laboratory Technology	
09.03.11	Microbiology, Bacteriology, Virology	511	Biological Science	
09.03.12	Pharmacology	231	Pharmacy	
09.03.13	Physiology	511	Biological Science	
09.03.14	Zoology	511	Biological Science	
09.03.15	Marine Science	511 523	Biological Science Earth Science	
09.03.99	Life, General Sciences - Other	511	Biological Science	
09.04	Mathematics	53	Mathematics and Statistics	
09.04.01	Mathematics – General	53	Mathematics and Statistics	
09.04.02	2 Applied Mathematics	531	Mathematics	
09.04.03	Pure Mathematics	531	Mathematics	
09.04.04	Statistics, Operations Research	531 532	Mathematics Statistics	
09.04.99	Mathematics – Other	531	Mathematics	

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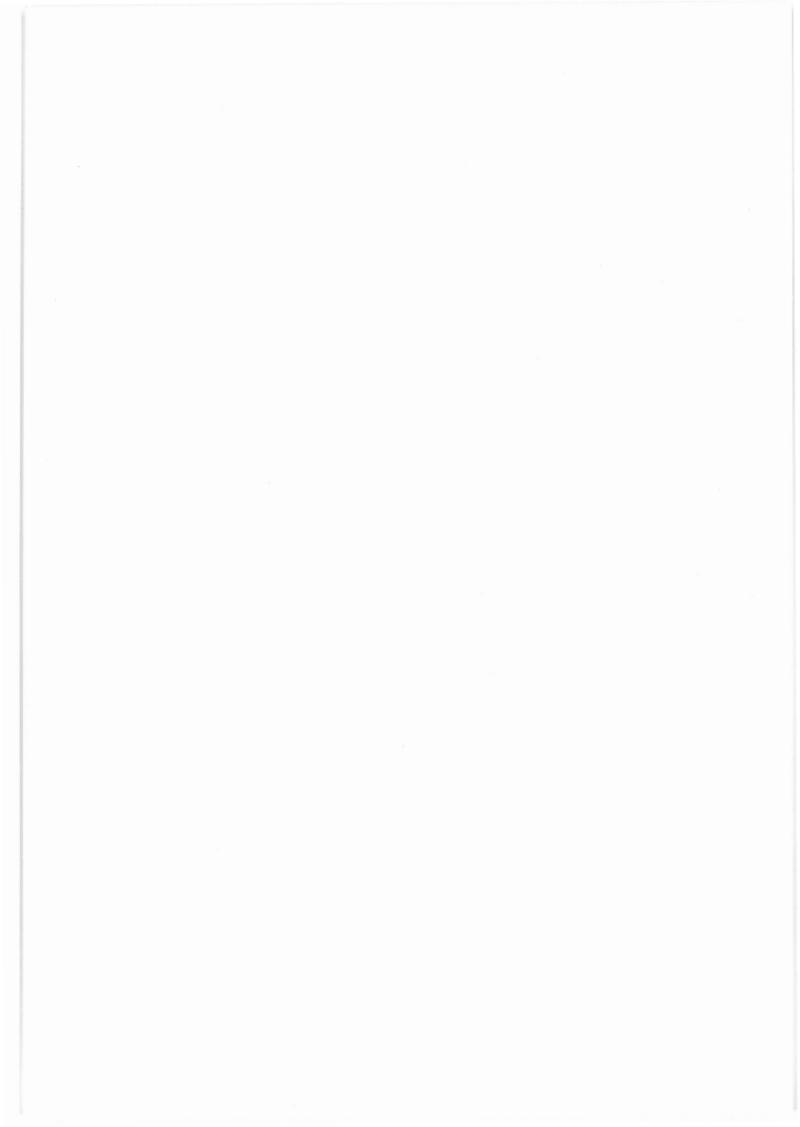
Code	Title	Code	Title
09.05	Physical Sciences	52	Physical Science
09.05.01	Physical Sciences – General	52	Physical Science
09.05.02	Chemistry	522	Chemistry
09.05.03	Geology, Earth Sciences	523	Earth Science
09.05.04	Nautical Science	931	Ship Operation
09.05.05	Physics	521	Physics
09.05.99	Physical Sciences – Other	529	Physical Science, nec
10	VETERINARY SCIENCE, ANIMAL CARE	25	Veterinary Studies
10.01	Veterinary Science, Animal Care – General	25	Veterinary Studies
10.01.01	Veterinary Science, Animal Care – General	25 251 252	Veterinary Studies Veterinary Science Veterinary Assisting
11	SERVICES, HOSPITALITY, TRANSPORTATION	9	MISCELLANEOUS FIELDS
11.01	Services, Hospitality, Transportation - General	9	MISCELLANEOUS FIELDS
11.01.01	Services, Hospitality, Transportation - General	9	MISCELLANEOUS FIELDS
11.02	Food/ Beverage, Hospitality, Tourism	<b>92</b> 134	Food and Hospitality Services Tourism
11.02.01	Food/beverage, Hospitality, Tourism – General	<b>92</b> 114	Food and Hospitality Services Hospitality Management
11.02.02	Bakery	922	Baking and Pastrycooking
11.02.03	Butchery	921	Meat Processing
11.02.04	General Cooking	923	Cooking
11.02.05	Hotel, Hospitality, Tourism	114 134 924 925	Hospitality Management Tourism Hospitality Services Waiting and Bar Service
11.02.99	Food/ beverage, Hospitality, Tourism - Other	929	Food and Hospitality Services, nec
11.03	Transportation	93	Transport
11.03.01	Transportation – General	93 111	Transport Business Management

Code	Title	Code	Title
11.03.02	Transportation/ materials Handling Operators	931 932 933	Ship Operation Aircraft Operation Air Traffic Control
11.03.03	Transportation/ material Storage Services	111 931 932	Business Management Ship Operation Aircraft Operation
11.03.99	Transport – Other	939	Transport, nec
11.04	Apparel Sales, Services	68 131	Textiles, Clothing and Footwear Wholesale and Retail Sales
11.04.01	Apparel Sales, Services – General	68 131	Textiles, Clothing and Footwear Wholesale and Retail Sales
11.04.02	Clothing, Clothing Materials	131 682	Wholesale and Retail Sales Garment Making
11.04.03	Footwear, Leatherwork	131 684 689	Wholesale and Retail Sales Footwear Textiles, Clothing and Footwear
11.04.99	Apparel Sales, Services – Other	131 689	Wholesale and Retail Sales Textiles, Clothing and Footwear
11.05	Other Services	91	Hairdressing and Beauty Therapy
11.05.01	Other Services - General	91	Hairdressing and Beauty Therapy
11.05.02	Hairdressing, Cosmetology	911 912	Hairdressing Beauty Therapy
11.05.03	Home Furnishings	131	Wholesale and Retail Sales
11.05.99	Other Service - Other	-	-

# **ABSCQ**

## **APPENDIX 3**

LINK BETWEEN THE ABSCQ AND THE INTERNATIONAL STANDARD CLASSIFICATION OF EDUCATION (ISCED)



	ABSCQ		ISCED
Code	Title	Code	Title
1	BUSINESS AND ADMINISTRATION	34	Commercial and Business Administration
		3401	Programmes General Commercial Programmes
11	Management	-	_
111	Business Management	3434	Business Administration, Marketing and Sales Programmes
112	Public and Institution Management	3452 3462	Programmes in Public Administration Programmes in Institutional Administration
113	Personnel Management	3438	Programmes in Labour Studies, including Personnel Administration
		3439	Programmes in Business Administration with Other Specialisation
114	Hospitality Management	3439	Programmes in Business Administration with Other Specialisation
119	Management, nec	3438	Programmes in Labour Studies, Including Personnel Administration
		3439	Programmes in Business Administration with Other Specialisation
		3499	Other Commercial, Clerical Business and Public Administration Programmes
12	Management Support Services	_	_
121	Office Management	3439	Programmes in Business Administration with Other Specialisation
122	Keyboarding and Shorthand	3404	Secretarial Programmes
		3408 3422	Clerical-typist Programmes Programmes in the Operation of Office Machines
		3426	Programmes in Electronic Data Processing
129	Management Support Services, nec	3408 3422	Clerical-typist Programmes Programmes in the Operation of Office Machines
		. 3499	Other Commercial, Clerical Business and Public Administration Programmes
13	Sales and Marketing		_
131	_	3434	Business Administration, Marketing and Sales Programmes
		7862	Retailing Programmes
132	Marketing	3434	Business Administration, Marketing and Sales Programmes
133	Real Estate	3439	Programmes in Business Administration with Other Specialisation
134	Tourism	7872	Tourist Trades Programmes
139	Sales and Marketing, nec	3434 3499	Business Administration, Marketing and Sales Programmes Other Commercial, Clerical Business and Public Administration Programmes
14	Financial Services	, ,-	, <del>-</del>
141	Accounting	3432	Programmes in Business Administration with Specialisation in Accountancy
142	Banking and Finance	3436	Programmes in Business Administration with Specialisation in Finance and Investment
143	Insurance	3439	Programmes in Business Administration with Other Specialisation

	ABSCQ		ISCED
Code	Title	Code	Title
149	9 Financial Services, nec	3436 3439 3499	Programmes in Business Administration with Specialisation in Finance and Investment Programmes in Business Administration with Other Specialisation Other Commercial, Clerical Business and Public Administration Programmes
2	HEALTH	50	Medical and Health Programmes
21	Medicine	. 5006	Programmes in Medicine, Surgery and Medical Specialities
21	1 General Medicine	5006	Programmes in Medicine, Surgery and Medical Specialities
212	2 Surgery	5006	Programmes in Medicine, Surgery and Medical Specialities
213	3 Psychiatry	5006	Programmes in Medicine, Surgery and Medical Specialities
214	4 Obstetrics and Gynaecology	5006	Programmes in Medicine, Surgery and Medical Specialities
21:	5 Anaesthesiology	5006	Programmes in Medicine, Surgery and Medical Specialities
210	6 Pathology	5006 5030	Programmes in Medicine, Surgery and Medical Specialities Medical Technology Programmes
217	7 Radiology	5006 5017 5019	Programmes in Medicine, Surgery and Medical Specialities Programmes in Medical X-ray Techniques Other Programmes in Medical Diagnostic and Treatment Techniques, Except Dental
218	8 Internal Medicine	5006	Programmes in Medicine, Surgery and Medical Specialities
219	9 Medicine, nec	5006 5019	Programmes in Medicine, Surgery and Medical Specialities Other Programmes in Medical Diagnostic and Treatment Techniques, Except Dental
22	Nursing	5012	Programmes in Nursing
221	1 Basic Nursing	5012	Programmes in Nursing
222	2 Midwifery	5015	Midwifery Programmes
223	Mothercraft Nursing	5012	Programmes in Nursing
224	4 Psychiatric Nursing	5012	Programmes in Nursing
225	5 Community Nursing	5012	Programmes in Nursing
229	Nursing, nec	5012 5018	Programmes in Nursing Nursing and Other Medical Auxiliary Programmes
23	Health Sciences	_	-
231	1 Pharmacy	5052	Programmes in Pharmacy
232	2 Physiotherapy	5008	Physiotherapy and Occupational Therapy/ Rehabilitation Medicine Programmes
233	3 Occupational Therapy	5008	Physiotherapy and Occupational Therapy/ Rehabilitation Medicine Programmes
234	4 Radiography	5017 5019	Programmes in Medical X-ray Techniques Other Programmes in Medical Diagnostic and Treatment Techniques, Except Dental
235	5 Optometry	5062 5286	Optometry Programmes Optical Lens Making
236	6 Chiropractic	5099	Other Medical Diagnostic and Treatment Programmes

	ABSCQ		ISCED
Code	Title	Code	Title
237	Speech Pathology	5008	Physiotherapy and Occupational Therapy/ Rehabilitation Medicine Programmes
238	Nutrition and Dietetics	6612 5006	Programmes with Emphasis on Household Food Management and Nutrition Programmes in Medicine, Surgery and Medical Specialities
239	Health Sciences, nec	5008 5099	Physiotherapy and Occupational Therapy/ Rehabilitation Medicine Programmes Other Medical Diagnostic and Treatment Programmes
24	Dental Studies	_	-
241	Dental Science	5042	Programmes in Dentistry, Stomatology and Odontology
242	Dental Assisting	5046	Other Programmes in Dental Techniques
243	Dental Technology	5046	Other Programmes in Dental Techniques
25	Veterinary Studies	_	_
251	Veterinary Science	6232	Programmes in Veterinary Medicine/ Animal Health
252	Veterinary Assisting	6232	Programmes in Veterinary Medicine/ Animal Health
		0232	riogrammo in vocamary medicancy rummar ricadar
29	Other Health	_	-
291	Ambulance Service	5099	Other Medical Diagnostic and Treatment Programmes
292	Occupational Health and Safety	5099	Other Medical Diagnostic and Treatment Programmes
299	Other Health, nec	5002 5019 5099	Public Health Inspection/ Hygiene Programmes Other Programmes in Medical Diagnostics and Treatment, except Dental Techniques Other Medical Diagnostic and Treatment Programmes
3	EDUCATION	14	Teacher Training and Education Science Programmes
31	School Teacher Training	_	_
311	Early Childhood Teaching	1412	Teacher Training for Teaching Pre-school and Kindergarten
312	Primary Teaching	1401	General Teacher Training Programmes
313	Secondary Teaching	1401 1404	General Teacher Training Programmes Teacher Training Programmes with Specialisation in a Non-vocational Subject
		1408	Teacher Training Programmes for Teachers of Vocational Subjects
314	Teacher Librarianship	1499	Other Programmes in Education Science and Teacher Training
32	Post-School Teacher Training	_	_
321	Technical Teaching	1408	Teacher Training Programmes for Teachers of Vocational
		1416	Subjects Teacher Training for Teachers in Adult Education
322	Nursing Education	1408	Teacher Training Programmes for Teachers of Vocational Subjects
		1416	Teacher Training for Teachers in Adult Education
329	Post-School Teacher Training, nec	1408	Teacher training programmes for Specialists in Vocational Subjects Teacher Training for Teachers in Adult Education
		1432 1499	Teacher Training for Teacher Trainers Other Programmes in Education Science and Teacher Training

	ABSCQ		ISCED
Code	Title	Code	Title
20	0.0 11		
39	Other Education	-	_
391	Teaching English as a Second Language	1416 1499	Teacher Training for Teachers in Adult Education Other Programmes in Education Science and Teacher Training
392	Special Education	1422 1499	Teacher Training for Teaching Handicapped Children Other Programmes in Education Science and Teacher Training
399	Other Education, nec	1472 1499	Programmes in Education Science without Teacher Training Other Programmes in Education Science and Teacher Training
4	SOCIETY AND CULTURE	22 2201	Humanities Programmes General Programmes in the Humanities
			General Programmes in the Humanities
41	Behavioural Studies	<b>30</b> 3001	Social and Behavioural Science Programmes General Programmes in the Social and Behavioural Sciences
411	Psychology	3052	Psychology Programmes
412	Sociology and Anthropology	3032 3035 3042	Sociology Programmes Programmes in Sociology, except Demography Anthropology Programmes
413	Politics	3022	Political Science Programmes
414	History	2251 2261	Programmes in History Programmes in Archeology
42	Welfare	-	=
421	Social Work	8932	Social Welfare Programmes
422	Child Care	6622	Programmes with Emphasis on Child Care
429	Welfare, nec	8932 8942	Social Welfare Programmes Programmes in Vocational Counselling
43	Librarianship	8422	Library Science Programmes
431	Librarianship	8422	Library Science Programmes
44	Language and Area Studies	22	Humanities Programmes
441	Literature	2211	Programmes in the Current or Vernacular Language and its
		2215 2221 2241	Literature Programmes in Other Living Languages and their Literature Programmes in "Dead" Languages and their Literature Programmes in Comparative Literature
442	Languages	2202 2208	Programmes for Interpreters and Translators Other Programmes in Languages, except the Current or Vernacular Language
		2211	Programmes in the Current or Vernacular Language and its Literature
		2215 2221 2231	Programmes in Other Living Languages and their Literature Programmes in "Dead" Languages and their Literature Programmes in Linguistics
449	Language and Area Studies, nec	3072 2241 2299	Studies in Regional Cultures Programmes in Comparative Literature Other Humanities Programmes
45	Religion and Philosophy	_	-
451	Religious Studies	2600	Religion and Theology
452	Philosophy	2271	Programmes in Philosophy

	ABSCQ		ISCED
Code	Title	Code	Title
46	Economics	_	-
461	Economics	3012	Economics Programmes
101	Bollomics	6212	Agricultural Economics Programmes
47	Law	38	Law and Jurisprudence Programmes
471	Law	3800	
4/1	Law	3801	Programmes For Local Magistrates General Programmes in Law
		3802	Programmes in Jurisprudence and History of Law
		3804	Programmes in International Law
		3806	Programmes in Labour Law
		3808	Programmes in Maritime Law
		3812	Programmes for "Notaires"
		3899	Other Law and Jurisprudence Programmes
48	Visual and Performing Arts	18	Fine and Applied Arts Programmes
	8	1801	General Programmes of Art Studies
481	Music	1822	Programmes in Music
482	Art and Craft	1802	Programmes in the History and Philosophy of Art
		1804	Programmes in Drawing and Painting
		1808	Programmes in Sculpturing
		1810	Programmes in Visual and Plastic Arts
		1812	Programmes in Handicrafts
483	Photography	1842	Programmes in Photography and Cinematography
	B	1899	Other Fine and Applied Arts Programmes
484	Graphic Design	1804	Programmes in Drawing and Painting
		1810	Programmes in Visual and Plastic Arts
		5278	Printing, Graphic Arts and Book-binding Programmes
485	Fashion Design	1899	
405	1 asmon Design	5276	Other Fine and Applied Arts Programmes Clothing and Related Trades Programmes
			Crothing and Related Trades Programmes
486	Drama and Dance	1832	Programmes in the Drama
		1899	Other Fine and Applied Arts Programmes
489	Visual and Performing Arts, nec	1812	Programmes in Handicrafts
		1899	Other Fine and Applied Arts Programmes
49	Other Society and Culture	_	-
491	Geography	3062	Geography Programmes
492	Communication	1942	
492	Communication	1842	Programmes in Photography and Cinematography
		8400 8402	Programmes in Mass Communication and Documentation
		8402	Programmes in Padio and T.V. Programmes in Padio and T.V. Programmes
		8404	Programmes in Radio and T.V. Broadcasting Public Relations Programmes
		8407	Other Programmes in Communications Arts
40.5	B		•
493	Recreation and Leisure	8962	Programmes in Physical Education
494	Policing Studies	8912	Programmes in Police Work and Related Law Enforcement

	ABSCQ		ISCED
Code	Title	Code	Tille
499	Other Society and Culture nee	2201	General Programmes in the Humanities
499	Other Society and Culture, nec	2299	Other Humanities Programmes
		3033	Programmes in Demography
		3099	Other Social and Behavioural Science Programmes
		3438	Programmes in Labour Studies, including Personnel
		3436	Administration
		5822	Programmes in Town or Community Planning
		6601	General Programmes in Home Economics
		6612	Programmes in Home Economics with emphasis on
			Household Food Management and Nutrition
		6632	Programmes in Home Economics with emphasis on
			Household Arts
		6699	Other Home Economics Programmes
		8425	Programmes for Technicians in Museums and Similar
			Repositories
		8913	Programmes in Criminology
		8917	Military Programmes
	NATURAL AND PHYSICAL SCIENCES	42	Natural Science Programmes
51	Life Sciences	_	_
511	Biological Science	4202	Biological Science Programmes
512	Environmental Science	8952	Programmes in Environmental Studies
52	Physical Science	_	_
	-		n n
521	Physics	4232	Physics Programmes
		4242	Astronomy Programmes
522	Chemistry	4212	Chemistry Programmes
523	Earth Science	4222	Geological Science Programmes
		4252	Meteorology Programmes
		4262	Oceanography Programmes
		6226	Soil and Water Sciences Programmes
529	Physical Science, nec	4299	Other Natural Science Programmes
53	Mathematics and Statistics	46	Mathematics and Computer Science Programmes
531	Mathematics	4601	General Programmes in Mathematics
551	Mathematics	4639	Other Programmes in Mathematics
		4037	Other Fregrammes in Mathematics
532	Statistics	4611	Programmes in Statistics
		4621	Programmes in Actuarial Science
54	Computer Science	46	Mathematics and Computer Science Programmes
			·
541	Computer Science	3426	Programmes in Electronic Data Processing
		4600	General Programmes in Computer Science
		4641	Programmes in Computer Science
59	Other Natural and Physical Sciences		-
		5010	E-d-dD-dD-d-D
591	Food Science	5212	Food and Drink Processing Programmes
		6222	Food Sciences and Technology Programmes
592	Laboratory Technology	5282	Laboratory Assistant Programmes
	,	5284	Laboratory Technician Programmes
		5284	Laboratory Technician Programmes

ABSCQ		ISCED		
Co	de	Title	Code	Title
	599	Other Natural and Physical Sciences, nec	4299 8425	Other Natural Sciences Programmes Programmes for Technicians in Museums and Similar Repositories
6		ENGINEERING	52 54 5400	Trade, Craft and Industrial Programmes Engineering Programmes Engineering Programmes
61		Surveying and Cartography	-	-
	611	Surveying	5402	Programmes in Surveying
	612	Cartography	3062	Geography Programmes
62	!	Civil Engineering	5416	Civil Engineering Programmes
	621	Civil Engineering	5406 5416	Programmes in Drafting and Design Civil Engineering Programmes
63	3	Electrical and Electronic Engineering	-	_
	631	Electrical and Electronic Engineering Science	5406 5422	Programmes in Drafting and Design Electrical and Electronics Engineering Programmes
	632	Powerline Installation and Maintenance	5222	Electrical and Electronics Trades Programmes
	633	Electrical Fitting	5222	Electrical and Electronics Trades Programmes
	634	Automotive Electrics	5222	Electrical and Electronics Trades Programmes
	635	Refrigeration and Air-conditioning Mechanics	5264	Heating, Air-conditioning and Refrigeration Trades Programmes
	636	Electrical Mechanics	5222	Electrical and Electronics Trades Programmes
	637	Communications Equipment Installation and Maintenance	5222	Electrical and Electronics Trades Programmes
	638	Electronic Equipment Servicing	5222	Electrical and Electronics Trades Programmes
	639	Electrical and Electronic Engineering, nec	5222	Electrical and Electronics Trades Programmes
6	4	Mechanical Engineering	-	_
	641	Mechanical Engineering Science	5406 5442	Programmes in Drafting and Design Mechanical Engineering Programmes
	642	Toolmaking	5232	Metal Trades Programmes
	643	Metal Fitting, Turning and Machining	5232 5242	Metal Trades Programmes  Mechanical Trades Programmes
	644	Sheetmetal Working	5232	Metal Trades Programmes
	645	Boilermaking and Welding	5232	Metal Trades Programmes
	646	Metal Casting and Patternmaking	5232	Metal Trades Programmes
	647	Aircraft Maintenance Engineering	5222 5242	Electrical and Electronics Trades Programmes Mechanical Trades Programmes
	648	Precision Metal Working	5232	Metal Trades Programmes
	649	Mechanical Engineering, nec	5232 5242	Metal Trades Programmes Mechanical Trades Programmes

	ABSCQ		ISCED
Code	Title	Code	Title
65	Metallurgical and Mining Engineering	_	_
651	Metallurgical Engineering Science	5412	Programmes in Chemical Engineering and Materials Techniques
		5432	Metallurgical Engineering Programmes
652	Mining Engineering Science	5436	Mining Engineering Programmes
659	Metallurgical and Mining Engineering, nec	5299 5412	Other Trade, Craft and Industrial Programmes Programmes in Chemical Engineering and Materials Techniques
66	Printing	5278	Printing, Graphic Arts and Book-binding Trades Programmes
661	Compositing	5278	Printing, Graphic Arts and Book-binding Trades Programmes
662	Graphic Reproduction	5278	Printing, Graphic Arts and Book-binding Trades Programmes
663	Printing Machining	5278	Printing, Graphic Arts and Book-binding Trades Programmes
664	Binding and Finishing	5278	Printing, Graphic Arts and Book-binding Trades Programmes
665	Screen Printing	5278	Printing, Graphic Arts and Book-binding Trades Programmes
669	Printing, nec	5278	Printing, Graphic Arts and Book-binding Trades Programmes
67	Automotive Engineering	_	_
671	Automotive Engineering Science	5406 5442	Programmes in Engineering Drafting and Design Mechanical Engineering Programmes
672	Vehicle Mechanics	5242	Mechanical Trades Programmes
673	Panel Beating	5232 5242	Metal Trades Programmes Mechanical Trades Programmes
674	Vehicle Painting	5242 5299	Mechanical Trades Programmes Other Trade, Craft and Industrial Programmes
675	Vehicle Building	5232 5242	Metal Trades Programmes Mechanical Trades Programmes
676	Vehicle Trimming	5276	Clothing and Related Trades Programmes
679	Automotive Engineering, nec	5299	Other Trade, Craft and Industrial Programmes
68	Textiles, Clothing and Footwear	-	-
681	Textile Engineering Science	5274 5499	Textile Trades Programmes Other Engineering Programmes
682	Garment Making	5276	Clothing and Related Trades Programmes
683	Upholstery	5276	Clothing and Related Trades Programmes
684	Footwear	5272 5276	Leather Trades Programmes Clothing and Related Trades Programmes
689	Textiles, Clothing and Footwear, nec	5272 5274 5276 7842	Leather Trades Programmes Textile Trades Programmes Clothing and Related Trades Programmes Laundry and Dry Cleaning Trades Programmes
69	Other Engineering	_	-
91	Chemical Engineering Science	5406 5412	Programmes in Drafting and Design Programmes in Chemical Engineering and Materials Techniques
692	Aeronautical Engineering Science	5406 5442	Programmes in Drafting and Design Mechanical Engineering Programmes

	ABSCQ		ISCED
Code	Title	Code	Title
693	Industrial Engineering Science	5406	Programmes in Drafting and Design
		5426	Industrial Engineering Programmes
694	Marine Engineering Science	5406 5442	Programmes in Drafting and Design Mechanical Engineering Programmes
695	Other Engineering Science	5299	Other Trade, Craft and Industrial Programmes
		5406	Programmes in Drafting and Design
		5442	Mechanical Engineering Programmes
		5452	Agricultural, Forestry and Fishery Engineering Technician Programmes
		5453	Agricultural Engineering Programmes
		5463	Forestry Engineering Programmes
		5499	Other Engineering Programmes
		8972	Programmes in Nautical Science
696	Marine Construction	5232	Metal Trades Programmes
		5242	Mechanical Trades Programmes
		8972	Programmes in Nautical Science
697	Wood Machining and Turning	5262	Woodworking Trades Programmes
698	Cabinet Making	5262	Woodworking Trades Programmes
699	Other Engineering, nec	1899	Other Fine and Applied Arts Programmes
		5242	Mechanical Trades Programmes
		5262	Woodworking Trades Programmes
		5299	Other Trade, Craft and Industrial Programmes
		5452	Agricultural, Forestry and Fishery Engineering Technician
		5499	Programmes Other Engineering Programmes
,	ARCHITECTURE AND BUILDING	-	-
71	Building Design	<b>58</b> 5801	Architectural and Town-Planning Programmes General Programmes in Architecture and Town-planning
711	Architecture	5802 5810	Programmes in Structural Architecture Architectural Programmes
712	Interior Design	1852	Programmes in Interior Design
719	Building Design, nec	5812	Programmes in Landscape Architecture
72	<b>Building Construction</b>	-	- 1000
721	Building Technology	5216	Building Trades Programmes, nec
722	Carpentry and Joinery	5216 5262	Building Trades Programmes, nec Woodworking Trades Programmes
723	Bricklaying	5216	Building Trades Programmes, nec
724	Painting, Decorating and Signwriting	5216	Building Trades Programmes, nec
725	Plastering	5216	Building Trades Programmes, nec
726	Plumbing	5216	Building Trades Programmes, nec
727	Roof Fixing	5216	Building Trades Programmes, nec
728	Floor and Wall Tiling	5216	Building Trades Programmes, nec
729	Building Construction, nec	5216	Building Trades Programmes, nec
		5299	Other Trade, Craft and Industrial Programmes

ABSCQ

**ISCED** 

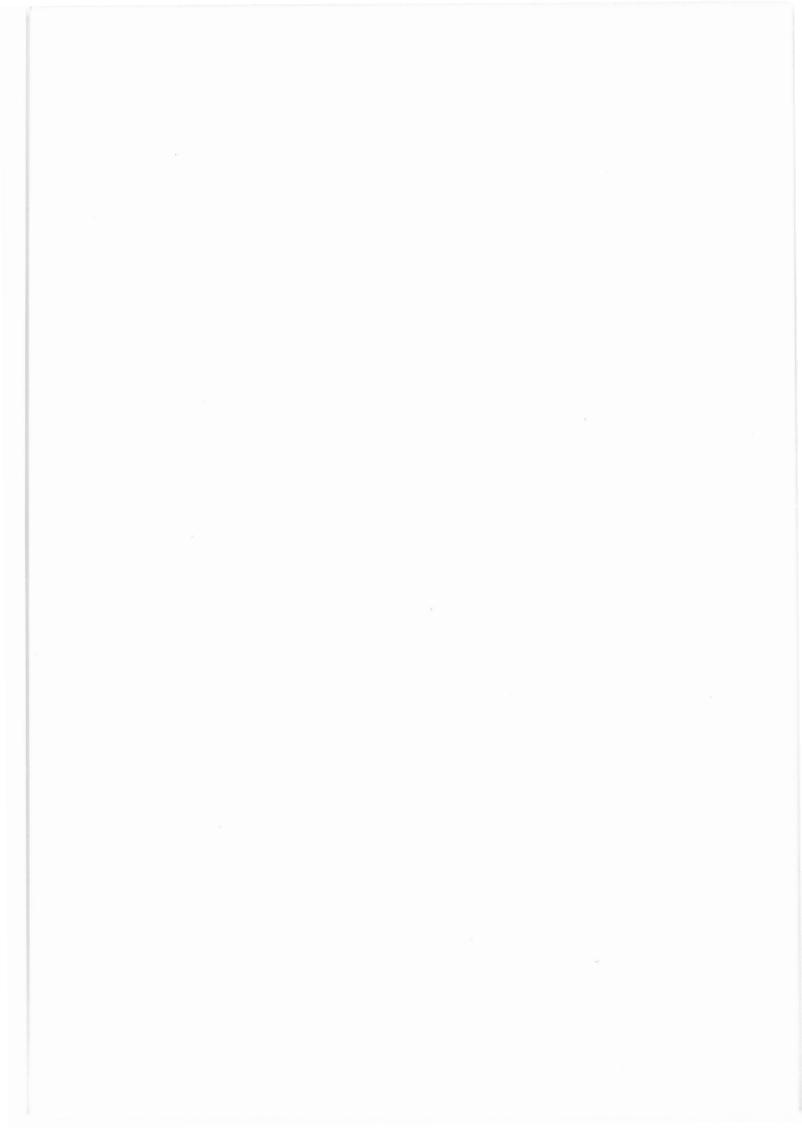
		ABSCQ		ISCED
C	ode	Title	Code	Title
7	19	Other Architecture and Building	-	-
	791	Floor Covering	5216 5299	Building Trades Programmes, nec Other Trade, Craft and Industrial Programmes
	792	Glass Working	5216 5299	Building Trades Programmes, nec Other Trade, Craft and Industrial Programmes
	793	Quantity Surveying	5801	General Programmes in Architecture and Town-planning
	799	Other Architecture and Building, nec	5299 5216	Other Trade, Craft and Industrial Programmes Building Trades Programmes, nec
8		AGRICULTURE AND RELATED FIELDS	62	Agriculture, Forestry and Fishery Programmes
8	31	Agriculture	6201	General Programmes in Agriculture
	811	Agricultural Science	6201 6202 6208 6249	General Programmes in Agriculture Programmes in Agriculture Crop Husbandry Programmes Other Programmes in Agriculture
	812	Wool Science	6249	Other Programmes in Agriculture
	813	Animal Husbandry	6203	Animal Husbandry Programmes
	819	Agriculture, nec	6249 6208	Other Programmes in Agriculture Crop Husbandry Programmes
8	32	Horticulture	6206	Horticulture and Gardening Programmes
	821	Horticulture	6206	Horticulture and Gardening Programmes
8	39	Other Agriculture and Related Fields	-	-
	891	Fisheries	6272	Programmes in Fishery Science and Technology
	892	Forestry	6262	Forestry Programmes
		Magny Avrova		
9		MISCELLANEOUS	-	-
9	1	Hairdressing and Beauty Therapy	78	Service Trades Programmes
	911	Hairdressing	7812	Barbering and Beauty Culture Programmes
	912	Beauty Therapy	7812	Barbering and Beauty Culture Programmes
9	2	Food and Hospitality Services	78	Service Trades Programmes
	921	Meat Processing	5299	Other Trade, Craft and Industrial Programmes
	922	Baking and Pastrycooking	7826	Programmes in Cooking
	923	Cooking	7822 7826	Hotel and Restaurant Trades Programmes Programmes in Cooking
	924	Hospitality Services	7822	Hotel and Restaurant Trades Programmes
	925	Waiting and Bar Service	7822	Hotel and Restaurant Trades Programmes
	929	Food and Hospitality Services, nec	7822 7899	Hotel and Restaurant Trades Programmes Other Service Trades Programmes

	ABSCQ		ISCED
Code	Title	Code	Title
93	Transport	<b>70</b> 7000	Transport and Communication Programmes Transport and Communication Programmes
931	Ship Operation	7004	Ship's Officer/ Seamen's Programmes
932	Aircraft Operation	7002	Air Crew Programmes
933	Air Traffic Control	7002	Air Crew Programmes
939	Transport, nec	7006 7008	Railway Operating Trades Programmes Road Motor Vehicle Operation Programmes
99	Other Miscellaneous Fields	89	Other Programmes
991	Plant and Machine Operation	5266	Materials-handling and Earth-moving Equipment Operating Programmes
992	Fire Technology	8915	Fire-protection and Fire-fighting Programmes
999	Other Miscellaneous Fields, nec	8919 8999	Other Civil Security and Military Programmes Other Programmes of Education, nec

# **ABSCQ**

### **APPENDIX 4**

LINK BETWEEN THE INTERNATIONAL STANDARD CLASSIFICATION OF EDUCATION (ISCED) AND THE ABSCQ



ABSCQ ISCED Title Code Title Code **EDUCATION Teacher Training and Education Science Programmes** 3 14 1401 General Teacher Training Programmes 312 **Primary Teaching** 313 Secondary Teaching Teacher Training Programmes with Specialisation in a 313 Secondary Teaching 1404 Non-vocational Subject Secondary Teaching 1408 Teacher Training Programmes for Teachers of Vocational 313 321 Technical Teaching Subjects Nursing Education 322 Post-School Teacher Training, nec 329 311 Early Childhood Teaching 1412 Teacher Training for Teaching Pre-school and Kindergarten 1416 Teacher Training for Teachers in Adult Education 329 Post-School Teacher Training, nec Teaching English as a Second Language 391 1422 Teacher Training for Teaching Handicapped Children 392 Special Education 1432 Teacher Training for Teacher Trainers 329 Post-School Teacher Training, nec 399 Other Education, nec 1472 Programmes in Education Science without Teacher Training 1499 Other Programmes in Education Science and Teacher Training 314 Teacher-Librarianship Post-School Teacher Training, nec 329 Teaching English as a Second Language 391 392 Special Education 399 Other Education, nec 48 Visual and Performing Arts 18 Fine and Applied Arts Programmes 48 Visual and Performing Arts 1801 General Programmes of Art Studies 1802 Programmes in the History and Philosophy of Art 482 Art and Craft Programmes in Drawing and Painting 482 Art and Craft 1804 484 Graphic Design 1808 Programmes in Sculpturing 482 Art and Craft Art and Craft 1810 Programmes in Visual and Plastic Arts 482 484 Graphic Design 482 Art and Craft 1812 Programmes in Handicrafts 489 Visual and Performing Arts, nec 1822 Programmes in Music 481 Music 486 Drama and Dance 1832 Programmes in the Drama Programmes in Photography and Cinematography 1842 483 Photography 492 Communication 712 Interior Design 1852 Programmes in Interior Design 1899 Other Fine and Applied Arts Programmes 483 Photography 485 Fashion Design 486 Drama and Dance 489 Visual and Performing Arts, nec 699 Other Engineering, nec SOCIETY AND CULTURE 22 **Humanities Programmes** 44 Language and Area Studies SOCIETY AND CULTURE 2201 General Programmes in the Humanities

Other Society and Culture, nec

499

ISCED	ABSCQ
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			None of the second seco
Code T	itle	Code	Title
2202	Programmes for Interpreters and Translators	442	Languages
2208	Other Programmes in Languages, except the Current or Vernacular Language	442	Languages
2211	Programmes in the Current or Vernacular Language and its Literature	441 442	Literature Languages
2215	Programmes in Other Living Languages and their Literature	441 442	Literature Languages
2221	Programmes in "Dead" Languages and their Literature	441 442	Literature Languages
2231	Programmes in Linguistics	442	Languages
2241	Programmes in Comparative Literature	441 449	Literature Language and Area Studies, nec
2251	Programmes in History	414	History
2261	Programmes in Archeology	414	History
2271	Programmes in Philosophy	452	Philosophy
2299	Other Humanities Programmes	449 499	Language and Area Studies, nec Other Society and Culture, nec
5	Religion and Theology Programmes	_	-
2600	Religion and Theology	451	Religious Studies
0	Social and Behavioural Science Programmes	41	Behavioural Studies
3001	General Programmes in the Social and Behavioural Sciences	41	Behavioural Studies
3012	Economics Programmes	461	Economics
3022	Political Science Programmes	413	Politics
3032	Sociology Programmes	412	Sociology and Anthropology
3033	Programmes in Demography	499	Other Society and Culture, nec
3035	Programmes in Sociology, except Demography	412	Sociology and Anthropology
3042	Anthropology Programmes	412	Sociology and Anthropology
3052	Psychology Programmes	411	Psychology
3062	Geography Programmes	491 612	Geography Cartography
3072	Studies in Regional Cultures	449	Language and Area Studies, nec
3099	Other Social and Behavioural Science Programmes	499	Other Society and Culture, nec
ı	Commercial and Business Administration Programmes	1	BUSINESS AND ADMINISTRATION
3401	General Commercial Programmes	1	BUSINESS AND ADMINISTRATION
3404	Secretarial Programmes	122	Keyboarding and Shorthand
3408	Clerical-typist Programmes	122 129	Keyboarding and Shorthand Management Support Services, nec

Code T	itle	Code	Title
3422	Programmes in the Operation of Office Machines	122 129	Keyboarding and Shorthand Management Support Services, nec
3426	Programmes in Electronic Data Processing	122 541	Keyboarding and Shorthand Computer Science
3432	Programmes in Business Administration with Specialisation in Accountancy	141	Accounting
3434	Business Administration, Marketing and Sales Programmes	111 131 132 139	Business Management Wholesale and Retail Sales Marketing Sales and Marketing, nec
3436	Programmes in Business Administration with Specialisation in Finance and Investment	142 149 142	Banking and Finance Financial Services, nec Banking and Finance
3438	Programmes in Labour Studies, including Personnel Administration	113 119 499	Personnel Management Management, nec Other Society and Culture, nec
3439	Programmes in Business Administration with Other Specialisation	113 114 119 121 133 143 149	Personnel Management Hospitality Management Management, nec Office Management Real Estate Insurance Financial Services, nec
3452	Programmes in Public Administration	112	Public and Institution Management
3462	Programmes in Institutional Administration	112 112	Public and Institution Management Public and Institution Management
3499	Other Commercial, Clerical Business and Public Administration Programmes	119 129 139 149	Management, nec Management Support Services, nec Sales and Marketing, nec Financial Services, nec
38	Law and Justine and an a December 2	47	V
3800	Law and Jurisprudence Programmes  Programmes for Local Magistrates	<b>47</b> 471	Law Law
3801	General Programmes in Law	471	Law
3802	Programmes in Jurisprudence and History of Law	471	Law
3804	Programmes in International Law	471	Law
3806	Programmes in Labour Law	471	Law
3808	Programmes in Maritime Law	471	Law
3812	Programmes for "Notaires"	471	Law
3899	Other Law and Jurisprudence Programmes	471	Law
	e de la companya de l		
42	Natural Science Programmes	5	NATURAL AND PHYSICAL SCIENCES
4202	Biological Science Programmes	511	Biological Science
4212	Chemistry Programmes	522	Chemistry
4222	Geological Science Programmes	523	Earth Science
4232	Physics Programmes	521	Physics

	ISCED		ABSCQ
Code Ti	itle	Code	Title
4242	Astronomy Programmes	521	Physics
4252	Meteorology Programmes	523	Earth Science
4262	Oceanography Programmes	523	Earth Science
4299	Other Natural Sciences Programmes	529	Physical Science, nec
42))	One Nation Sciences Programmes	599	Other Natural and Physical Sciences, nec
5	Mathematics and Computer Science Programmes	53 54	Mathematics and Statistics Computer Science
4600	General Programmes in Computer Science	541	Computer Science
4601	General Programmes in Mathematics	531	Mathematics
4611	•	532	Statistics
	Programmes in Statistics		
4621	Programmes in Actuarial Science	532	Statistics
4639	Other Programmes in Mathematics	531	Mathematics
4641	Programmes in Computer Science	541	Computer Science
)	Medical and Health Programmes	2	HEALTH
5002	Public Health Inspection/ Hygiene Programmes	299	Other Health, nec
5006	Programmes in Medicine, Surgery and Medical Specialities	21	Medicine
		211 212	General Medicine Surgery
		213	Psychiatry
		214	Obstetrics and Gynaecology
		215	Anaesthesiology
		216	Pathology
		217	Radiology
		218	Internal Medicine
		219 238	Medicine, nec Nutrition and Dietetics
5000	National Control of the Control of t		
5008	Physiotherapy and Occupational Therapy/Rehabilitation Medicine Programmes	232 233	Physiotherapy Occupational Therapy
	medicine i logianines	233	Speech Pathology
		239	Health Sciences, nec
5012	Programmes in Nursing	22	Nursing
		221	Basic Nursing
		223	Mothercraft Nursing
		224	Psychiatric Nursing
		225	Community Nursing
		229	Nursing, nec
5015	Midwifery Programmes	222	Midwifery
5017	Programmes in Medical X-ray Techniques	217	Radiology
5010	N		
	, ,		
5019			
	rechniques, Except Dental		
		277	Onici maini, ilee
			•

5030 Medical Technology Programmes

216 Pathology

Code T	Code Title		Title
5042	Programmes in Dentistry, Stomatology and Odontology	241	Dental Science
5046	Other Programmes in Dental Techniques	242 243	Dental Assisting Dental Technology
5052	Programmes in Pharmacy	231	Pharmacy
5062	Optometry Programmes	235	Optometry
			•
5099	Other Medical Diagnostic and Treatment Programmes	236	Chiropractic
		239 291	Health Sciences, nec Ambulance Service
		292	Occupational Health and Safety
		299	Other Health, nec
2	Trade, Craft and Industrial Programmes	6	ENGINEERING
		72 79	Building Construction Other Architecture and Building
5200	Trade, Craft and Industrial Programmes	6	ENGINEERING
		72	<b>Building Construction</b>
		79	Other Architecture and Building
5201	General Trade, Craft and Industrial Programmes	6	ENGINEERING
		72	<b>Building Construction</b>
		79	Other Architecture and Building
5212	Food and Drink Processing Programmes	591	Food Science
5216	Building Trades Programmes, nec	721	Building Technology
		722	Carpentry and Joinery
		723	Bricklaying
		724	Painting, Decorating and Signwriting
		725 726	Plastering Plumbing
		727	Roof Fixing
		728	Floor and Wall Tiling
		729	Building Construction, nec
		791	Floor Covering
		792	Glass Working
		799	Other Architecture and Building, nec
5222	Electrical and Electronics Trades Programmes	632	Powerline Installation and Maintenance
		633	Electrical Fitting
		634	Automotive Electrics
		636	Electrical Mechanics
		637	Communications Equipment Installation and Maintenance
		638	Electronic Equipment Servicing
		639	Electrical and Electronic Engineering, nec
		647	Aircraft Maintenance Engineering
5232	Metal Trades Programmes	642	Toolmaking
		643	Metal Fitting, Turning and Machining
		644	Sheetmetal Working
		645	Boilermaking and Welding
		646	Metal Casting and Patternmaking
		648	Precision Metal Working
		649 673	Mechanical Engineering, nec Panel Beating
		675	Vehicle Building
		696	Marine Construction

Code T		Code	Title
5242	Mechanical Trades Programmes	643	Metal Fitting, Turning and Machining
		647	Aircraft Maintenance Engineering
		649	Mechanical Engineering, nec
		672	Vehicle Mechanics
		673	Panel Beating
		674	Vehicle Painting
		675	Vehicle Building
		696	Marine Construction
		699	Other Engineering, nec
5262	Woodworking Trades Programmes	697	Wood Machining and Turning
		698	Cabinet Making
		699	Other Engineering, nec
		722	Carpentry and Joinery
5264	Heating, Air-conditioning and Refrigeration Trades Programmes	635	Refrigeration and Air-conditioning Mechanics
5266	Materials-handling and Earth-moving Equipment Operating Programmes	991	Plant and Machine Operation
5272	Leather Trades Programmes	684	Footwear
		689	Textiles, Clothing and Footwear, nec
5274	Textile Trades Programmes	681	Textile Engineering Science
3214	Textile Hades Hogianines	689	Textiles, Clothing and Footwear, nec
5276	Clothing and Related Trades Programmes	485	Fashion Design
		676	Vehicle Trimming
		682	Garment Making
		683	Upholstery
		684	Footwear
		689	Textiles, Clothing and Footwear, nec
5278	Printing, Graphic Arts and Book-binding Trades Programmes	66	Printing
		484	Graphic Design
		661	Compositing
		662	Graphic Reproduction
		663	Printing Machining
		664	Binding and Finishing
		665	Screen Printing
		669	Printing, nec
5282	Laboratory Assistant Programmes	592	Laboratory Technology
5284	Laboratory Technician Programmes	592	Laboratory Technology
5286	Optical Lens Making	235	Optometry
5299	Other Trade, Craft and Industrial Programmes	659	Metallurgical and Mining Engineering, nec
		674	Vehicle Painting
		679	Automotive Engineering, nec
		695	Other Engineering Science
		699	Other Engineering, nec
		729	Building Construction, nec
		791	Floor Covering
		792	Glass Working
		799	Other Engineering nos
		699 921	Other Engineering, nec Meat Processing
	Engineering Programmes	6	ENGINEERING
5400			
J400	Engineering Programmes	6	ENGINEERING

5402

Programmes in Surveying

611 Surveying

	ISCED		ABSCQ
Code Ti	tle	Code	Title
5406	Programmes in Drafting and Design	621 631 641 671 691 692 693 694	Civil Engineering Electrical and Electronic Engineering Science Mechanical Engineering Science Automotive Engineering Science Chemical Engineering Science Aeronautical Engineering Science Industrial Engineering Science Marine Engineering Science Other Engineering Science
5412	Programmes in Chemical Engineering and Materials Techniques	651 659 691	Metallurgical Engineering Science Metallurgical and Mining Engineering, nec Chemical Engineering Science
5416	Civil Engineering Programmes	<b>62</b> 621	Civil Engineering Civil Engineering
5422	Electrical and Electronics Engineering Programmes	631	Electrical and Electronic Engineering Science
5426	Industrial Engineering Programmes	693	Industrial Engineering Science
5432	Metallurgical Engineering Programmes	651	Metallurgical Engineering Science
5436	Mining Engineering Programmes	652	Mining Engineering Science
5442	Mechanical Engineering Programmes	641 671 692 694 695	Mechanical Engineering Science Automotive Engineering Science Aeronautical Engineering Science Marine Engineering Science Other Engineering Science
5452	Agricultural, Forestry and Fishery Engineering Technician Programmes	695 699 695	Other Engineering Science Other Engineering, nec Other Engineering Science
5453	Agricultural Engineering Programmes	695	Other Engineering Science
5463	Forestry Engineering Programmes	695	Other Engineering Science
5499	Other Engineering Programmes	681 695 699	Textile Engineering Science Other Engineering, nec
58	Architectural and Town-Planning Programmes	71	Building Design
5801	General Programmes in Architecture and Town-Planning	<b>71</b> 793	Building Design Quantity Surveying
5802	Programmes in Structural Architecture	711	Architecture
5810	Architectural Programmes	711	Architecture
5812	Programmes in Landscape Architecture	719	Building Design, nec
5822	Programmes in Town or Community Planning	499	Other Society and Culture, nec
62	Agriculture, Forestry and Fishery Programmes	8	AGRICULTURE AND RELATED FIELDS
6201	General Programmes in Agriculture	<b>81</b> 811	Agriculture Agricultural Science
6202	Programmes in Agriculture	811	Agricultural Science
6203	Animal Husbandry Programmes	813	Animal Husbandry
6206	Horticulture and Gardening Programmes	<b>82</b> 821	Horticulture Horticulture

Code T	îitle	Code	Title
6208	Crop Husbandry Programmes	811 819	Agricultural Science Agriculture, nec
6212	Agricultural Economics Programmes	461	Economics
6222	Food Sciences and Technology Programmes	591	Food Science
6226	Soil and Water Sciences Programmes	523	Earth Science
6232	Programmes in Veterinary Medicine/Animal Health	251 252	Veterinary Science Veterinary Assisting
6249	Other Programmes in Agriculture	811 812 819	Agricultural Science Wool Science Agriculture, nec
6262	Forestry Programmes	892	Forestry
6272	Programmes in Fishery Science and Technology	891	Fisheries
66	Home Economics (Domestic Science Programs)	_	-
6601	General Programmes in Home Economics	499	Other Society and Culture, nec
6602	Programs with Emphasis on Dressmaking and Needlecraft	682 482	Garment Making Art and Craft
6612	Programmes with Emphasis on Household Food Management and Nutrition	238 499 238	Nutrition and Dietetics Other Society and Culture, nec Nutrition and Dietetics
6622	Programmes with Emphasis on Child Care	422	Child Care
6632	Programmes in Home Economics with emphasis on Household Arts	499	Other Society and Culture, nec
6699	Other Home Economics Programmes	499	Other Society and Culture, nec
0	Transport and Communication Programmes	93	Transport
7000	Transport and Communication Programmes	93	Transport
7002	Air Crew Programmes	932 933	Aircraft Operation Air Traffic Control
7004	Ship's Officer/ Seamen's Programmes	931	Ship Operations
7006	Railway Operating Trades Programmes	939	Transport, nec
7008	Road Motor Vehicle Operation Programmes	939	Transport, nec
7026	Postal Service Programmes except Electronics Equipment Installation and Servicing	-	
7029	Other Communication Programmes	93	Transport
8	Service Trades Programmes	91 92	Hairdressing and Beauty Therapy Food and Hospitality Services
7800	Service Trades Programmes	91 92	Hairdressing and Beauty Therapy Food and Hospitality Services
7812	Barbering and Beauty Culture Programmes	911 912	Hairdressing Beauty Therapy

Title	Code Tille
22 Hotel and Restaurant Trades Programmes  26 Programmes in Cooking  42 Laundry and Dry Cleaning Trades Programmes	923 Cooking 924 Hospitality Services 925 Waiting and Bar Service 929 Food and Hospitality Services, nec 922 Baking and Pastrycooking 923 Cooking 689 Textiles, Clothing and Footwear, nec
62 Retailing Programmes	131 Wholesale and Retail Sales
72 Tourist Trades Programmes	134 Tourism
99 Other Service Trades Programmes	929 Food and Hospitality Services, nec
Programmes in Mass Communication and Documenta	tion – –
OO Programmes in Mass Communication and Documentation	492 Communication
O2 Programmes in Journalism	492 Communication
Programmes in Radio and T.V. Broadcasting	492 Communication
Public Relations Programmes	492 Communication
Of Other Programmes in Communications Arts	492 Communication
22 Library Science Programmes	43 Librarianship 431 Librarianship
Programmes for Technicians in Museums and Similar Repositories	<ul><li>Other Society and Culture, nec</li><li>Other Natural Science, nec</li></ul>
Programmes in Documentation Techniques, nec	
Other Programmes	99 Other Miscellaneous Fields
Programmes in Police Work and Related Law Enforceme	nt 494 Policing Studies
Programmes in Criminology	499 Other Society and Culture, nec
Fire-protection and Fire-fighting Programmes	992 Fire Technology
Military Programmes	499 Other Society and Culture, nec
Other Civil Security and Military Programmes	999 Other Miscellaneous Fields, nec
Social Welfare Programmes	421 Social Work 429 Welfare, nec
Programmes in Vocational Counselling	Welfare, nec
Programmes in Environmental Studies	512 Environmental Science
Programmes in Physical Education	493 Recreation and Leisure
Programmes in Nautical Science	<ul><li>Other Engineering Science</li><li>Marine Construction</li></ul>

# **ABSCQ**

## **APPENDIX 5**

LINK BETWEEN THE ABSCQ AND THE 1986 CENSUS CLASSIFICATION

#### Link Between the 1986 Census Classification of Qualifications and ABSCQ

The 1986 Census classification used level of attainment for the broadest categories in the classification. Within each level of attainment category, fields of study were identified. However, these fields of study were not consistent between levels of attainment, therefore, the fields of study may be different according to the level at which they were studied. The ABSCQ has maintained some degree of comparability with the 1986 Census classification. However, differences in the classification structure and coding process used in the 1986 Census may pose some practical difficulties when attempting any detailed comparison.

#### LEVEL OF ATTAINMENT

	1986 CENSUS	ABSCQ	
Code	Title	Code	Title
0	Higher Degree Level	1	Higher Degree
1	Graduate Diploma Level	2	Postgraduate Diploma
2	Bachelor Level	3	Bachelor Degree
3	Diploma Level	4 5	Undergraduate Diploma Associate Diploma
4	Certificate - Trade Level	6	Skilled Vocational Qualifications
5	Certificate – Other Level	5 7	Associate Diploma Basic Vocational Qualifications

Whilst there is a fairly good correlation between levels 0, 1, 2 and 3 of the 1986 Classification and ABSCQ, care should be exercised when attempting to compare levels 4 and 5 of the 1986 Classification to ABSCQ.

On the basis of the Census Dress Rehearsal, it is estimated that approximately 95% of Skilled Vocational Qualifications are Trade Certificate qualifications, the remainder comprising of certificates assessed as being of equivalent level (although not necessarily in a trade). As yet, no estimate of the proportion of Trade Certificates in Skilled Vocational Qualifications has been produced from 1991 Census data.

Care should also be exercised when attempting to relate the 1986 Level 5 *Certificate – Other Level* with ABSCQ. Advanced Certificates, Certificates of Technology and Technician Certificates (all ABSCQ Level 5) were coded to this 1986 category, as well as basic vocational certificates (ABSCQ Level 7) and possibly hobby courses (which are out of scope of ABSCQ).

### FIELD OF STUDY

1986 CENSUS		ABSCQ
Title	Code	Title
MANAGEMENT, ADMINISTRATION AND RELATED FIELDS	1	BUSINESS AND ADMINISTRATION
NATURAL AND MATHEMATICAL SCIENCES	5	NATURAL AND PHYSICAL SCIENCES
Natural and Applied Sciences	51 52 59	Life Sciences Physical Sciences Other Natural and Physical Sciences
Mathematical and Computer Sciences	53 54	Mathematics and Statistics Computer Science
ENGINEERING AND TECHNOLOGY	6	ENGINEERING
ARCHITECTURE AND BUILDING	7	ARCHITECTURE AND BUILDING
SOCIAL SCIENCES	4	SOCIETY AND CULTURE
HUMANITIES	4	SOCIETY AND CULTURE
RELIGION AND THEOLOGY	45	Religion and Philosophy
EDUCATION	3	EDUCATION
Teacher Training	31 32	School Teacher Training Post–School Teacher Training
Education NEC and not specified	39	Other Education
MEDICINE AND HEALTH		HEALTH
Medicine	21	Medicine
Dentistry	24	Dental Studies
Paramedicine	29	Other Health
VETERINARY SCIENCE		Veterinary Studies
ARTISTIC, LITERARY AND PERFORMING ARTS		Languages and Area Studies Visual and Performing Arts
AGRICULTURE AND FORESTRY		AGRICULTURE AND RELATED FIELDS
MANUFACTURING AND CONSTRUCTION		ENGINEERING
Electrical and Electronic	63	Electrical and Electronic Engineering
Metal	65	Metallurgical and Mining Engineering
Vehicle	67	Automotive Engineering
Printing	66	Printing
Furniture	68	Textiles, Clothing and Footwear
Footwear, Clothing and Textile	68	Textiles, Clothing and Footwear

#### FIELD OF STUDY (cont...)

1986 CENSUS	ABSCQ	
Title	Code	Title
SERVICES		MISCELLANEOUS FIELDS
Transport and Communication	93	Transport
Food and Related Services	92	Food and Hospitality Services
Other Services	91	Hairdressing and Beauty Therapy
	494	Policing Studies
MILITARY AND DEFENCE		-
FIELD OF STUDY NOT ELSEWHERE CLASSIFIED		-
FIELD OF STUDY NOT SPECIFIED		-

Whilst there is a broad correlation between the 1986 Classification fields of study **names** and ABSCQ, it is not particularly meaningful to link the 1986 Classification **codes** with those of ABSCQ. This is due to the fact that field of study codes assigned using the 1986 Classification depend on the level of the qualification and are not uniform across all levels as they are in ABSCQ. For example, using the 1986 Classification, *Religion and Theology* can be assigned the following field of study codes depending on the level: 33 (level 0); 35 (level 1); 36 (levels 2 and 3); and 23 (level 5), compared to using ABSCQ where it is assigned the code 45 (narrow field) for all appropriate levels of attainment.



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